THE LIVED EXPERIENCES OF GRADE 11 LEARNERS CONSIDERED ACADEMICALLY GIFTED

by

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DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ABSTRACT

Gifted children represent an important component of a nation's intellectual capital, with the resources to find innovative solutions to scientific and social challenges. Since the advent of democracy in South Africa in 1994, limited attention has been paid to gifted education as a research focus. To ensure quality education for all learners, current educational policy supports inclusive education. However, there is a gap between the policies which have been developed and their implementation at grassroots level in the school and classroom. In particular, several recent South African studies on gifted education suggest that gifted learners are at the end of the queue for educational provision.

In this qualitative and collective instrumental case study, framed within an interpretive paradigm, I set out to explore the lived experiences of academically gifted Grade 11 learners. I wanted to gain an insight into how it felt to be gifted, and how their experiences played out in the various systems in their respective contexts. A further aim was to assess their specific academic support needs, in order to make a contribution to designing quality education for this particular group.

The expression of giftedness is viewed as dependent on the interactions of the child with his or her environment, so Bronfenbrenner's bio-ecological model was taken as the theoretical framework for the study. I chose a descriptive multiple case study design, using purposive sampling to select six participants, three from each of two schools in sharply contrasting socio-economic backgrounds in a large rural town. I used three methods of data collection, semi-structured individual interviews, a semi-structured focus group interview, and collages. Qualitative content analysis was used for both phases of data analysis, within-case analysis and cross-case analysis.

The findings showed that gifted learners from both affluent and disadvantaged backgrounds faced similar challenges in developing their potential. They often felt neglected and academically under-stimulated. They identified specific deficiencies in both their schools and communities which needed to be addressed to ensure optimal learning opportunities. Despite the similarity of their experiences, the learners from the school in the disadvantaged community had to combat greater challenges than those from an affluent background.

Key words: Inclusive education, giftedness, gifted education, academically gifted, Bronfenbrenner's bio-ecological model, Grade 11 learners

OPSOMMING

Begaafde kinders verteenwoordig 'n baie belankrike komponent van 'n nasie se intellektuele kapitaal. Hulle beskik oor innerlike bronne om innoverende oplossings vir wetenskaplike asook sosiale uitdagings te bied. Vanaf die aanvang van demokrasie in 1994 in Suid-Afrika, is beperkte aandag aan begaafdekindonderwys as navorsingsfokus gegee. Die huidige onderwysbeleid ondersteun inklusiewe onderwys om sodoende kwaliteit onderrig aan alle leerders te verseker. Daar blyk egter 'n gaping te wees tussen beleidsontwikkeling en die inplementering daarvan op grondvlak, in skole en klaskamers. Verskeie onlangse Suid-Afrikaanse studies oor begaafdekindonderwys dui in die besonder daarop dat begaafde leerders agter in die ry staan as dit kom by voldoende onderwysvoorsiening.

In hierdie kwalitatiewe, kollektiewe en instrumentele gevallestudie, ingebed binne die raamwerk van 'n interpretatiewe paradigma, het ek my beywer om die beleefde ervaringe van akademies begaafde Graad 11 leerders te ondersoek. Ek wou insig bekom oor hoe hulle, hulle eie begaafdheid ervaar, asook hoe dit uitspeel in die verskillende sisteme binne hulle onderskeie kontekste. 'n Verdere doelwit van hierdie studie was ook om spesifiek hulle akademiese ondersteuningsbehoeftes te evalueer ten einde sodoende 'n bydrae te lewer ten opsigte van die ontwerp van kwaliteit onderrig vir hierdie spesifieke groep.

Die interaksies tussen die kind en sy of haar omgewing speel 'n belangrike rol in die uitdrukking van begaafdheid. Om hierdie rede is Bronfenbrenner se bio-ekologiese model as teoretiese raamwerk vir hierdie studie aangewend. Ek het 'n beskrywende, veelvuldige gevallestudie-ontwerp gekies en doelmatigheid-steekproefneming aangewend om die ses deelnemers, drie van twee skole in sterk kontrasterende sosio-ekonomiese agtergronde in 'n groot plattelandse dorp, te selekteer. Ek het drie metodes, naamlik semi-gestruktureerde individuele onderhoude, 'n semi-gestruktureerde fokusgroep-onderhoud asook collages, ingespan om data in te samel. Kwalitatiewe inhoudsanalise is gebruik vir beide data-analisefases, naamlik binne-geval-analise en kruis-geval-analise.

Die bevindinge het getoon dat begaafde leerders van beide welvarende en benadeelde agtergronde soortgelyke uitdagings ten opsigte van die ontwikkeling van hul potensiaal in die gesig staar. Hulle het dikwels verwaarloos en akademies onder-gestimuleer, gevoel. Hulle het spesifieke leemtes in beide hulle skole en gemeenskappe geïdentifiseer wat aangespreek moet word om optimale leergeleenthede te verseker. Ten spyte van die ooreenkomste in hul ervarings, moes die leerders van die skool in die agtergeblewe gemeenskap groter uitdagings die hoof bied as die leerders van die meer gegoede agtergrond.

Sleutelwoorde: Inklusiewe onderwys, begaafdheid, begaafdekindonderwys, akademiese begaafdheid, Bronfenbrenner se bio-ekologiese model, Graad 11-leerders

DEDICATION

To all those 'un-explored' hidden treasures –
the Van Goghs, Einsteins, Fonteyns and Mandelas
in our midst

It is through your brilliancy, uniqueness and sensitivity
that you touch those who are meant to be touched
by your gifts of mind and spirit

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ABBREVIATION LIST

AAEGT:	Australian Association for the Education of Gifted and Talented Children
CAPS:	Curriculum and Assessment Policy Statement for the further education and training phase grades 10 – 12
EFA:	Education for all
ELSEN:	Education for Learners with Special Educational Needs
EMDC:	Educational Management and Development Centre
FET:	Further Education and Training
GET:	General Education and Training
HE:	Higher Education
IQ:	Intelligence Coefficient
NAGTCSA:	National Association of Gifted and Talented Children in South Africa
NCS:	National Curriculum Statement
NQF:	National Qualifications Framework
PPCT Model:	Person-Process-Context-Time Model
OBE:	Outcomes-Based Education
RNCS:	Revised National Curriculum Statement
SES:	Socio-Economic Status
TASC:	Thinking Actively in a Social Context
UK:	United Kingdom
UNESCO:	United Nations Educational, Scientific and Cultural Organisation
UNICEF:	United Nations International Children's Emergency Fund
UNISA:	University of South Africa
USA:	United States of America

CHAPTER ONE

INTRODUCTION

1.1 CONTEXTUALIZATION AND RATIONALE OF THE RESEARCH STUDY

This qualitative study, which is embedded in an interpretive constructivist paradigm, aims to explore the lived experiences of Grade 11 learners who are perceived as *academically* gifted as well as create an awareness of adequately addressing these learners' unique and specific needs. Giftedness is currently a controversial and contested phenomenon in educational literature (Taylor & Kokot, 2000; Perleth, Schatz & Mönks, 2000; Sutherland, 2006). The identification and education of gifted learners in South Africa is furthermore characterized by a complex, historical developmental trajectory (Van der Westhuizen & Maree, 2006; Kokot, 2011).

During the Apartheid regime, before the advent of democracy in 1994, giftedness received a fair amount of attention. According to Strydom (1991) and Freeman (2002), a surge of interest in those identified as being gifted was evident in South Africa in the 1980s. The Human Sciences Research Council in Pretoria became interested when the first attempts were made during the 1980s to explore educational opportunities for gifted black children (Taylor & Kokot, 2000; Freeman, 2002). Several provinces, such as Kwa-Zulu Natal and the former 'Transvaal', now Gauteng, established centres for gifted children (Taylor & Kokot, 2000; Van der Westhuizen & Maree, 2006). Institutions were established and conferences were planned to provide for the needs of such children. However, the unstable political climate of the time had an impact on attendance at the schools, and the conferences were sometimes boycotted (Taylor & Kokot, 2000). South Africa and Israel were seen as the two developing nations which led the world in the level of their commitment to the education of the gifted or talented (Taylor & Kokot, 2000). This commitment however was not evident in education departments responsible for black education in the less developed areas of South Africa (Taylor & Kokot, 2000). Discrimination, as well as special programmes, was at the heart of the former regime (Taylor & Kokot, 2000; Freeman, 2002).

With the arrival of democracy in 1994, education in South Africa underwent a process of transformation. The provision of special education for gifted children was terminated. Interest in and development of gifted learners and their education was viewed as a "white elitist" practice, reminding the oppressed of a hangover of colonial times, in which the "finest education was reserved for a few and the vast majority of the population received almost none" (Freeman, 2002, p. 152). According to Taylor and Kokot (2000, p. 812) and Freeman (2002, p. 152), as well as Kokot (2011, pp. 510, 511), after 1994 only minor efforts, such as the programme "Thinking Actively in a Social Context (TASC)", were made in black townships to provide for gifted learners. Such learners in black communities were handicapped not only by schools and an educational system which did not challenge them, but also by their own communities (Xolo, 2007). At the macro-level, many gifted learners from all socio-economic levels as well as diverse cultures were neglected

and overlooked (Freeman, 2002; Xolo, 2007; Kokot, 2011). According to Van der Westhuizen and Maree (2006), it seemed as if the human rights of gifted learners were not recognized under the new educational dispensation.

Hernandez De Hahn (2000) maintains that the way giftedness is interpreted depends on the values and world views of each particular culture. The collectivist African cultures recognize giftedness, but only in so far as it benefits the individual's family and community (Wallace & Radloff, 1992; Freeman, 2002; Xolo, 2007). Taylor and Kokot (2000, p. 802) concur with this notion, adding that "giftedness in individuals is recognized and valued in African culture so long as the ability is used for the greater good of the family and/or community rather than promoting only the well-being of the individual."

Van der Westhuizen and Maree (2006) further argue that the plight of the gifted learner is rarely mentioned, a view echoed by Terman (cited in Kokot, 2011, p. 510):

> "True democracy demands that every child, whether superior, average or inferior in ability be given the fullest opportunity to develop to the limit of his (her) mental capacity. It is the gifted child, more than any other, who has hitherto lacked this opportunity."

Today, the Basic Department of Education does support an inclusive education system. Learners with diverse abilities and needs are included in mainstream classrooms. Those who are considered gifted should therefore receive their education together with their peers (De Villiers, 2009).

The Constitution of South Africa, incorporating the *Bill of Rights*, informed the transformation in education. It stipulated that all individuals had the right to be respected and treated with equality. It further stressed the principle of social justice, including the right of every individual to both basic and further education (RSA, 1996). The South African Schools Act No. 84 of 1996 further reinforced this concept, stipulating that "education of progressively high quality for all learners" should to be provided (Department of Education, 1996, p. 1). In accomplishing this, "a strong foundation for the development of all our people's talents and capabilities", one that could "advance the democratic transformation of society", was to be laid down (Department of Education, 1996, p. 1). The rights of all learners were to be upheld (Department of Education, 1996). Education White Paper 6, Special Needs Education: Building an Inclusive Education and Training System, laid down that all learners should be enabled to pursue their learning potential to the fullest (Department of Education, 2001). It also stipulated that no unfair discriminative practices be allowed and that equality be established and maintained (and, by extension, for learners who were gifted).

The *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010) contended that all learning styles and types of intelligence should be acknowledged, recognized and catered for in the education system. This was to ensure that no learner's unique abilities or needs would be overlooked (Department of Education, 2001; Department of Education, 2010). The *Curriculum and Assessment Policy Statement* (CAPS) *for the further education and training phase grades 10 – 12* (Department of Basic Education, 2011, pp. 3–5) reflected this principle of nurturing the values contained in the Constitution, offering equal

educational opportunities for all sections of the population, thus ensuring that all learners received an education fitting their unique needs, however diverse.

Thus South Africa now ascribes to the global tendency to work towards inclusion, ensuring quality education for all learners, regardless of their abilities, specific needs or barriers to learning. Various international developments have had a significant impact upon the implementation of such an inclusive educational approach in South Africa. The Salamanca Statement of 1994 (UNESCO, 1994) proposed that Human Rights should be respected and that fundamental policy shifts were therefore critical to developing inclusive educational practices. The aim was to include all learners in education, ensuring quality education for all those with different and diverse abilities (UNESCO, 1994). This document furthermore stated that a child-centred pedagogy was beneficial to all learners, promoting the development of unique abilities and needs. Different learning styles and rates of learning were to be accommodated. Further recommendations included tapping into all available resources and partnering with community members and parents, enhancing the future development of all children (UNESCO, 1994). The Salamanca Statement thus set a standard and vision by which progress of inclusive practices in schools could be measured (Swart & Pettipher, 2011).

While the current education system in South Africa does not explicitly accommodate the gifted learner, the message in policy initiatives is that all learners, including those who are gifted, should receive quality education (Van der Westhuizen & Maree, 2006). According to the *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010), the curriculum should be differentiated and presented in such a way that the needs of learners, ranging from those with intellectual disabilities to those who are gifted, are accommodated. The report additionally stipulated that "highly gifted learners will contribute according to their strengths and interests" and that therefore "joint planning, discussion and reflection will stretch some learners and add value to the learning of all participants" (Department of Education, 2010, p. 68). A range of different tasks and activities should therefore be designed to support the diverse learning needs in the mainstream classroom.

Although provision is made for the gifted learner at policy level, there is a gap between policy formulation and its implementation at ground level in schools and classrooms. According to Taylor and Kokot (2000) and Van der Westhuizen and Maree (2006), insufficient provision is made for gifted learners, despite the fact that they are present in mainstream classes and entitled to education that will address their specific needs and optimize their potential (Department of Education, 2001; Van der Westhuizen & Maree, 2006).

Already in 1991, Strydom proposed that all learners, and specifically gifted learners, should be adequately prepared for the demands they would encounter by 2010 regarding job opportunities and the challenges of the workplace (Strydom, 1991). She urged that, if as a nation we were to survive future challenges, we needed to nurture, explore and develop the hidden potential within these 'gifted treasures', as well as that of the total school population (Strydom, 1991). Van der Horst (2000, p. 109) concurred with Strydom, arguing that for these learners to become the highly professional, competent thinkers and problem solvers they could be, both they and their communities needed to "meet the demands of the twenty-first century." Xolo (2007,

p. 206) also made a strong plea that "[i]t is not the gold in the mines, but the talents and the minds of our gifted youth which will make our country an effective participant in the global playing field."

Defining giftedness, however, is not always easy. In doing so, it is important to consider both individual and contextual factors and to employ flexible strategies in identifying these learners and assessing their giftedness (De Villiers, 2009), before measures can be taken to effectively support them and optimize their potential. Against this backdrop, the current study aims to explore the lived experiences of Grade 11 learners considered academically gifted, in an effort to assess their support needs, as well as to determine to what extent policy aims for academically gifted learners are realized in mainstream classrooms.

1.2 MOTIVATION

Gifted children represent a nation's intellectual capital, with the potential to bring creative, innovative solutions to scientific, medical, economic, political and social challenges (Tannenbaum, 2000; Winner, 2000; Kokot, 2011). Exploring the literature on giftedness (both international and South African) reveals much debate and controversy. Research in South Africa on giftedness, and specifically on the lived experiences of adolescents, is limited and is evidently a neglected terrain for research (Taylor & Kokot, 2000; Wallace, 2007; Kokot, 2011). The literature prior to democracy in 1994, like the international literature, focused on the possibilities of identifying gifted learners, facilitating enrichment programmes for them, and assessing the benefits or negative consequences of these (Tomlinson-Keasey, 1990; Sternberg, 2000; O'Connor, 2012). After democracy, however, giftedness as a research focus in South Africa received limited attention (Strydom, 1991; Freeman, 2002).

According to Freeman (2002), Xolo (2007), and Kokot (2011), the South African education system has ignored the abilities and talents of gifted learners. Taylor and Kokot (2000) contend that the focus both in discussions on education and in policy documents is on 'disabled' and 'disadvantaged' learners. Because of this emphasis, mention of the highly able has been almost non-existent in the various new policy proposals. Maree, in a conversation with Wallace (Wallace, 2007, p. 196), noted that, "Sadly, very little is being done in South Africa to meet the needs of the highly gifted, especially the needs of the disadvantaged highly talented or gifted." In view of the dismantling of the facilities for the gifted provided by the previous government, including closing down centres for the gifted, Kokot describes the current status of education for the gifted in South Africa as 'dismal', adding that "officials have still failed to highlight the predicament of the gifted learner" (Wallace, 2007, p. 196). Freeman (2002) too is concerned that gifted learners, being a nation's national resource, should be granted the opportunity to develop their full potential, as they could make unique contributions to society. Should we neglect our own 'most precious gifts', we are in peril of stifling societal, social and human progress and development (Tomlinson-Keasey, 1990; Kokot, 2011). Sisk (1987, cited in Strydom, 1991, p. 1), confirmed that "the neglect of their development is a loss that cannot be calculated."

While these "hidden treasures" are to be found in every culture, community and in every school, they themselves may be unaware of their own abilities and capacities (Mastropieri & Scruggs, 2004, p. 134).

Taylor and Kokot (2000, p. 801) concur that "all cultures include individuals who excel and have special abilities." Paasche, Gorrill and Strom (2004) agree that academically gifted learners are found at all levels of society, but that it remains a challenge to identify them. My rationale for this study was therefore to draw attention to how these adolescents (unit of analysis) experience being academically gifted, as well as to gain an understanding of their assets and needs. I wanted to create an awareness of and address the unique needs of these learners in mainstream classrooms. The two schools in the study served as a context within which to report on the individuals' lived experiences, their needs, the support they were given, and their successes.

According to Coleman and Cross (2000, p. 208), the personal experience of being gifted or talented is "relatively unexplored". They maintain that these individuals' actual experiences, as seen from their own perspective, have "been missing" (Coleman & Cross, 2000, p. 208). To more closely examine their joys, satisfactions, worries, pressures, frustrations and specific needs within an inclusive education system, I needed to explore their understanding of what they perceived as essential, and what it was appropriate to provide for them in the inclusive education system. Giving these learners the opportunity to voice their experiences would also add to the, at present limited literature. It might also suggest ways of enabling them to accomplish their full potential, to lead fulfilling lives and to make valuable contributions to the development of human society, especially in South Africa. To this end they should therefore be recognized for their intellectual supremacy.

1.3 PROBLEM STATEMENT

In this study, I aimed to explore the lived experiences of Grade 11 learners who are considered *academically* gifted as well as create an awareness of the importance of adequately addressing academically gifted adolescents' unique and specific needs in our current education system, given that these learners are a community's "intellectual capital" (Freeman, 2002, p. 152-153). Despite a thorough literature research, I could find no South African research study which allowed the academically gifted learners a voice in narrating their lived experiences or identified their support needs in the school context. According to Kokot (2011), there is an urgent need to re-focus attention on and gain understanding of giftedness and the value it holds for society. It is essential to look at how giftedness is understood by different individuals from different contexts. Coleman and Cross (2000, p. 211) postulate that "by increasing our knowledge of the lived experiences of being gifted, we will be advancing our understanding of giftedness itself." This would offer greater insight into how giftedness is understood and valued in a multi-cultural South African context. Research with this focus therefore seems crucial.

Additionally, the perception or "edu-myth" that children who are exceptionally talented or gifted can teach themselves and can make it on their own without support in the classroom is to be questioned (Geake, 2009, p. 83). Hardman, Drew and Egan (2005, p. 514) contest the assumption that these "individuals will reach their full potential without any specialized programmes or assistance." They call this a fallacy which should be challenged. Kokot (1999, p. 32) supports this view, adding that this "myth about gifted children being able to excel without attention from their teachers should once and for all be dispelled." Other literature

points to an enriched curriculum as one way of supporting these learners in the classroom (Tomlinson-Keasey, 1990; Winner, 2000; Geake, 2009).

Participants in this study were therefore given the opportunity consciously to reflect on their lives and school careers. In reflecting on their lived experiences, they could impart valuable information which could serve to inform schools and teachers, as well as the education system itself. Xolo (2007, p. 204) claims that "literature hasn't much to say about the gifted and very little about the gifted" in developing countries. Freeman (2002) concurs that South Africa is in dire need of rethinking the way in which all learners with unique needs are to be accommodated, as the optimization of their abilities seems to have been neglected. As previously noted, a gap exists between policy initiatives and how these initiatives are realized in making provision for quality education for gifted learners. Hence, the questions remain, do inclusive classroom practices effectively provide for these learners' specific needs, and to what extent is the gap between policy specification and classroom implementation addressed and accounted for? Are these learners' needs really being catered for and if not, how could this be altered in line with their expressed/voiced lived experiences and needs?

The question therefore arises whether the education system in South Africa adequately provides for the education of those learners considered academically gifted. This study aimed to make a contribution to determining whether the educational needs of the gifted learner are sufficiently provided for in our current inclusive education system.

1.4 RESEARCH AIM

The research aim of this study was to explore the lived experiences of adolescents in Grade 11 who were considered *academically* gifted. I wanted to gain insight into how the experience of being gifted played out in the various systems impacting on these learners' lives, primarily the school, their parents, their peer groups, and the broader community. A secondary aim was to explore the support needs of these learners as experienced in an inclusive education system, in order to make a contribution to quality education for this particular group of learners.

1.5 RESEARCH QUESTIONS

The question that guided the research was: What are the participating Grade 11 learners' experiences of being academically gifted? The following sub-questions were also investigated:

- What contributes to their success, focusing on the various systems and proximal processes within their contexts?
- What are the specific support needs of these gifted learners which will allow them to optimize their potential?
- Are these needs sufficiently provided for in the current inclusive education system in South Africa?

1.6 RESEARCH PROCESS

In this section, I will describe what the research process entailed, focusing on the paradigm of choice, the theoretical framework (Bronfenbrenner's bio-ecological model) which served as a lens through which various aspects were discussed, the design and structure of the study, as well as the methodology that would be followed to address the research question. A comprehensive discussion of the research process will be included in Chapter three. This section will merely provide a summarized introduction to frame the study.

1.6.1 Paradigm

The study used an interpretive-constructivist paradigm to explore the lived experiences of six Grade 11 learners in two schools in different socio-economic contexts in a rural area in the Western Cape Province (Merriam, 2009), situated within one Educational Management and Development Centre (EMDC). According to Kuhn (1962, cited in Terre Blanche, Durrheim & Painter, 2006), a paradigm is a system by which various constructs of human behaviour are examined and explained. It is seen as the interpretive framework comprising "the basic set of beliefs that guides action", directing the researcher in the research process and defining the nature of the enquiry (Terre Blanche *et al*., 2006, p. 6; Denzin & Lincoln, 2011, p. 13). A paradigm thus maps the research process, acting as a lens through which it can be viewed.

Denzin and Lincoln (2011, p. 12) hold that all research paradigms are guided by three principles, ontology, epistemology and methodology. These relate to beliefs about the perspective of reality (ontology), one's relationship to what is known (epistemology), and how knowledge is obtained (methodology) (Denzin & Lincoln, 2011). In an interpretive qualitative study, the multiple, subjective, context-bound realities of the participants are explored (ontology) within a natural setting, while "collecting substantial, situational information" (methodology) (Henning, Van Rensburg & Smit, 2004, pp. 20-21; Merriam, 2009, p. 11; Denzin & Lincoln, 2011, p. 22). The researcher looks for themes which shape participants' unique realities, endeavouring to understand the way they make or construct meaning, as well as the nature of the meaning they derive from these subjective realities (epistemology and ontology) (Henning *et al*., 2004). The interaction between the knower and what is known, which shape each other in these subjective realities, illustrates the epistemology of an interpretive-constructivist paradigm (Denzin & Lincoln, 2011).

This paradigm asserts that participants make meaning of the phenomenon being studied, and the researcher, as key instrument, in turn mediates the meaning through an inductive strategy, delivering a thick description as the outcome of the study (Denzin & Lincoln, 2011). The researcher therefore derives rich and meaningful information from the expressed or voiced experiences of the participants.

1.6.2 Theoretical framework

Giftedness is viewed as being dependent on the reciprocal interactions between the child and his or her environment. The theoretical framework which informed this study was therefore that of Bronfenbrenner's bio-ecological approach (Kokot, 2011).

The bio-ecological approach defines the individual as a system comprising sub-systems embedded within various other systems which are interrelated and interdependent. It is also referred to as the "person-process-

context-time" (PPCT) model (Swart & Pettipher, 2011, p. 11). Four interacting dimensions are key tenets central to the bio-ecological approach: the person, the interacting processes (proximal and distal processes), the context (mico-, meso-, exo- and macro-systems/levels) and the time element, also known as the chronosystem (taking in historical influences as well as the time exposed to various interactions and influences). These four dimensions define and explicate the various systemic influences on human development, as well as the actualization of genetic potential, with human development viewed as "the product of a network of interactions" (Swart & Pettipher, 2011, p. 11). They are in a dynamic, interrelated, interdependent relationship with one another, influencing and changing each other (Schoon, 2000). These reciprocal interactions between the individual and the environment may be influenced at various levels. This can result in different outcomes for each unique individual, depending on the various factors involved, for example the role that cultural background - or the lack thereof - plays with regard to exposure to opportunities (Mönks & Mason, 2000; Swart & Pettipher, 2011; Kokot, 2011).

The development and realization of high ability or gifted potential in an individual depends on nurture and support from the environment. These include especially the influence of proximal processes, also known as the immediate interactional processes, such as those between the adolescent and parents, family, peers and school (Mönks & Mason, 2000). Swart and Pettipher (2011, p. 11) hold that "proximal processes serve as mechanisms for actualizing genetic potential for effective psychological" and academic functioning. The necessary conditions are either already prevalent or are created "to fan and nurture the biological spark of giftedness" (Kokot, 2011, p. 512). In turn, giftedness expresses itself and influences the contextual relationships (Kokot, 2011). Sternberg, Jarvin and Grigorenko (2011, p. 77) concur that the development of human ability and potential is closely linked to the environmental context, and that it is almost "impossible to cleanly separate biological from environmental contributions to intelligence." Both environmental and biological factors therefore play essential roles in developing giftedness and the "manifestation of intelligence" (Sternberg *et al*., 2011, p. 77). The environment serves as an 'incubator' to develop the individual's aptitude. Thus, a social context is needed to optimize the self-actualization of a gifted individual (Al-Shabatat *et al*., 2009). A detailed discussion of Bronfenbrenner's bio-ecological approach will follow in Chapter two.

1.6.3 Research design

For this research, a descriptive, qualitative case study design was employed. Babbie and Mouton (2010) and Terre Blanche *et al.* (2006) view a research design as a framework of action, linking the research question with the execution of the project. According to Terre Blanche *et al.* (2006), the aim of the design is to supply the research project with a plan and structure in order to maximize the validity of the eventual findings. The four decision-making dimensions (purpose, context, paradigm and techniques) that are used to produce a coherent guide for action were employed in planning the research design and will be discussed in detail in Chapter three (Terre Blanche *et al*., 2006).

The research design made provision for a blueprint that would ensure the validity of the study, but also offered a "flexible guide for action", specified as "an iterative process in which the researcher will engage"

(Terre Blanche *et al.*, 2006, p. 36). A case study is a bounded system which yields an in-depth description of the phenomenon under study (Henning *et al.*, 2004; Merriam, 2009). According to Yin (2008, cited in Merriam, 2009), a case study is an empirical inquiry which explores a present-day phenomenon in a real-life context. It focuses on the participant's relation to the environment, and in particular stresses developmental factors (Flyvberg, 2011). The researcher's interest is primarily on the process and the context, as well as on the individual's interaction with his or her context. The focus is on discovering and exploring, rather than on confirming certain predictions or hypotheses (Henning *et al.*, 2004).

In this research, multiple case studies were conducted in two schools in diverse communities. Six Grade 11 learners, identified as academically gifted by their teachers, were treated as separate case studies. Each learner thus represented a bounded system (case) (Merriam, 2009). The in-depth exploration gave voice to the different learners' lived experiences, as well as ensuring greater triangulation of the data collected.

The participants were selected through a process of purposive sampling. This draws on the researcher's own knowledge of the population to decide the criteria by which participants will be selected to fit the aim of the research (De Vos, Strydom, Fouché & Delport, 2005; Babbie & Mouton, 2010). For this study, a small subset of participants of the larger population was selected (Babbie & Mouton, 2010). As noted earlier, the identification of learners who are considered academically gifted is problematic; it is viewed as "a complex and controversial business" (Sutherland, 2006, p. 59). Mönks and Mason (2000, p. 144) hold that the "traditional dependence on intelligence measures is misguided as a basis for identifying giftedness"; simply using psychometric testing as an identification tool for academic giftedness is therefore not valid. According to Trost (2000, p. 318), teacher ratings "turned out to be fairly good predictors of later achievement in school." He noted that "a combined teacher rating of students' cognitive and creative abilities proved better than the combined results of a battery of ability and creativity tests" (Trost, 2000, p. 318)

This study leant heavily on teachers' knowledge of their learners. The teachers were informed about the aims of the study and were asked to manage their contribution with sensitivity and confidentiality to ensure the privacy and anonymity of the participating learners. I asked the teachers to identify three potential participants who met the selection criteria as listed below in Table 1.1. I then directly approached the three participants to ask for their voluntary participation in the study. They were selected according to the following criteria:

- Three Grade 11 learners in each school identified as academically gifted by the teachers.
- Learners of both genders to be included in the sample (if possible).

The criteria as shown in Table 1.1 were made available to the teachers to assist them in the identification process.

Table 1.1: Possible identification criteria

1.	Demonstrates insight
2.	Thrives on intellectual activity
3.	Is persuasive; can influence others
4.	Sustains concentration
5.	Is widely informed
6.	Enjoys interactions with adults
7.	Experiments, explores, pursues ideas
8.	Is concerned with justice, fairness
9.	Has multiple and/or extended interests
10.	Is self-motivated, goal-oriented, persistent
11.	Exhibits expertise in one or more areas
12.	Displays mature sense of humour
13.	Uses subtleties of words, numbers, symbols
14.	Is resourceful, flexible
15.	Is original, unconventional, imaginative

(Adapted from Sousa, 2009, p. 245)

1.6.4 Methodology

Methodology is concerned with the specific ways to obtain data or the procedures of inquiry (Henning *et al*., 2004). Henning *et al*. (2004, p. 36) refer to it as a coherent group of methods which are compatible and which complement one another to "deliver data and findings that will reflect the research question and suit the research purpose." The methodology followed in this study was qualitative. According to Merriam (2009), a qualitative methodology aims at gaining an understanding of how people construct their worlds and interpret their lived experiences, as well as giving meaning to them. An emic or insider's perspective is given to the phenomenon of interest. Thus the Grade 11 learners' understandings of their experiences of being academically gifted (within their various contexts) informed the data in this study.

I focused on four key principles, the better to understand the nature of qualitative research as it applied to the lived experiences of the six gifted Grade 11 learners: the overall process (understanding and meaning-making), the principal or key instrument of collecting and analysing data (myself as the researcher), the inductive process (synthesizing particular facts to draw a general conclusion or discover the various emerging themes), and the product (rich and descriptive in nature) (Merriam, 2009). A more detailed discussion on the methodology will follow in Chapter three.

1.6.4.1 Literature study

A comprehensive literature review will be presented in Chapter two. This contextualizes the research, showing how the project fitted into the specific field of study. The literature review also identified the gaps in the extant research studies (Kaniki, 2006).

1.6.4.2 Data collection

As the researcher, I was the primary instrument in collecting the data. Data collection consists of "asking, watching and reviewing" that which may become data (Merriam, 2009, p. 85). This implies that data is not merely 'out there' waiting to be collected. It is rather a process whereby the researcher has to 'notice' the data relevant to the aim of the study. This involves both the selection of data and the techniques needed to collect it. These affect what will finally be accepted as data for research purposes. Through an in-depth interview, information is gained about participants' subjective realities in a formatted discussion, guided and managed by the researcher (Henning *et al.*, 2004; Marshall & Rossman, 2011).

Semi-structured individual interviews, collages and a focus group interview were used in this study to collect the relevant data.

- **Semi-structured individual interview**

A single semi-structured in-depth individual interview was the primary source of data generation and was conducted with each learner. Individual interview schedules, comprising open-ended questions, lent structure to the interview and ensured that the same questions would be asked of the six participants. However, I was flexible and allowed the participants to talk openly about their personal understanding and experiences of being gifted, and how these were received and made provision for in their unique bio-ecological contexts (Merriam, 2009; Babbie & Mouton, 2010). The interviews varied from approximately 60 to 90 minutes.

In these interviews, the "what" of the participants' feelings, thoughts and experiences were made known, from which I tried to understand the meaning-making of the participants (Henning *et al.*, 2004). These interviews were tape-recorded and transcribed verbatim (Merriam, 2009).

Additionally, collage, a creative visual strategy, was employed as part of the in-depth individual interviews to generate more data. This strategy will be introduced in Chapter three.

- **Focus group interview**

As indicated, I made use of a focus group interview as an additional way of generating data. This is a method whereby data is obtained in a collective context (Merriam, 2009; Babbie & Mouton, 2010; Marshall & Rossman, 2011). Such data "is socially constructed within the interaction of the group" (Merriam, 2009, pp. 93-94). Occurring in a more relaxed, flexible environment where the participants' opinions may be informed by those of the others in the group, it allows the researcher to explore unanticipated issues which may arise from the discussion (Marshall & Rossman, 2011). Focus group results have high face validity, making the findings appear more believable. Such groups are cost- and time-effective, yielding quick results (Marshall & Rossman, 2011). They also allow the researcher to observe social interactions around the phenomenon

being investigated, in this case giftedness, in a limited period of time (Babbie & Mouton, 2010). According to Babbie and Mouton (2010, p. 292), they "provide direct evidence about similarities and differences in the participants' opinions and experiences".

After the completion of the six individual interviews, the data was analysed. It was then used to compile an appropriate focus group interview guide. The focus group interview included all the participants and was used to check the data with them (member checking), as well as to clarify uncertainties and pursue salient themes (Merriam, 2009). Member checking, or respondent validation, is a strategy used to ensure that feedback solicited on emerging findings is credible (Merriam, 2009). Once the interviews were completed and the transcriptions done, the process of analysis began.

1.6.5 Data analysis

Qualitative content analysis was used in this study, as described by Henning *et al*. (2004). Data analysis is the process whereby the researcher converts raw data into "final patterns of meaning" (Henning *et al*., 2004, p. 102). It also involves making sense of and giving meaning to the data through a process of consolidation, reduction and interpretation of what the participants said, as well as what the researcher observed (Merriam, 2009). This process is complex but dynamic. During it, the researcher moves backward and forward between the various aspects of the data, both concrete and abstract. This involves describing and interpreting as well as moving between inductive and deductive reasoning strategies. It yields meaning and understanding which contribute to the eventual findings (Merriam, 2009).

The first phase of data analysis employed in this study is referred to as within-case analysis. In this, themes unique to each individual case are identified, as well as anything which may help the researcher to learn more about the systemic factors which might have a bearing on the case (Merriam, 2009). Once the within-case analysis was completed, the second phase, that of cross-case analysis, was used to "build abstractions across cases" (Merriam, 2009, p. 204). This involved tracing unified patterns which cut across the various single cases and identifying further categories and themes as well as differences across these cases. This further aided the formulation of particular recommendations for the relevant role-players (Merriam, 2009). An elaborative discussion on qualitative content analysis and within-case analysis is presented in Chapter three.

1.7 ETHICAL ISSUES/CONSIDERATIONS

Ethical considerations are an important aspect of any research study. This is especially so when humans participants are involved. The ethical considerations in this study were strongly focused on human rights, as advocated by professionals such as educational psychologists. Wassenaar (2006) highlights four ethical principles to ensure that a research study is conducted in an ethical way. These are: autonomy and respect for the dignity of those involved; non-maleficence (ensuring the protection of participants against harmful or negative influences); beneficence (the researcher endeavours to maximize the benefits of the research for the participants); and justice (ensuring fair and equitable treatment of participants at all times during the research process). I applied these principles in this study and their practical implications will be elaborated in Chapter

three. The main ethical considerations included obtaining approval from all the organizations involved, gaining informed consent from the research participants, and ensuring the confidentiality of the participants and their settings.

1.8 CONCEPTUAL ANALYSIS

1.8.1 Further Education and Training (FET) band

The FET band constitutes all the learning and training programmes from the National Qualifications Framework (NQF), comprising Levels 2 to 4, or the equivalent of Grades 10 to 12 in the school system. In the NQF, this band directly follows on the General Education and Training (GET) band and precedes Higher Education (HE). Learners enter the FET band after completing the compulsory education phase (Grade 9 or Level 1) of the NQF. Education within the FET band is not compulsory and has no age limit, but is fully supported by the government (Department of Education, 1998).

The goal of the FET curriculum is to promote lifelong learning and ensure on-the-job education. It aims to deepen the foundation established by the GET phase, as well as laying a basis for specialist learning, preparing learners for further studies and employment. It also endeavours to develop learners holistically, to ensure that they will become citizens committed to promoting democracy and contributing to the economic and social development of the country (Department of Education, 2003). In the FET band, `Grade 11 learner' refers to a learner in his or her adolescent phase. This developmental phase will be discussed in more depth in Chapter two.

1.8.2 Lived experiences

'Lived experiences' refers to the many experiences that an individual encounters throughout life. According to the SAGE dictionary ([n.d.]), the term *lived* refers to first-hand experiences which are unique to each individual. *Experience* in turn refers to the various events or observations that an individual encounters daily. It includes states, emotions and sensations that may be experienced physically or psychologically, as well as contextually. It also describes the accumulation of knowledge or skills that result from this direct participation in events or activities (SAGE, [n.d]).

1.8.3 Giftedness

At present, there is no consensus on the definition of "giftedness". Some researchers regard it as a trait which is not fixed, but which encompasses creativity (Sternberg, 2000). Others, such as Gagné (2004~~, p. 12~~), argue that it includes a wide variety of abilities, talents and propensities. It is associated with talent and the ability to achieve well scholastically and in general is viewed as the human capacity to perform at the highest level (Coleman, 2004).

For this study, a holistic approach was taken in defining academic giftedness. The following definition, put forward by Kokot, was used, as it makes provision for all systems which relate to the individual's development, as well as referring to the individual's innate ability (Kokot, 2011). She suggests that giftedness is:

> "… dependent on the interaction between the child and the environment. Accordingly, giftedness can be explained in terms of a system interrelating with other systems. The high ability is seen to be biologically rooted in the child, and develops as an expression of a system of interrelated influences within the child's inner and outer environment. This means that children may be born with the genetic potential for giftedness, but this potential needs to be nurtured to fruition by and within children's life worlds" (Kokot, 2011, p. 511).

Thus giftedness is the innate potential, "latent or realized" for "extraordinary achievement" in one or more areas, as specifically valued within different cultures (De Villiers, 2009, p. 22; Kokot, 2011, pp. 511, 513). The optimal realization of this innate potential depends on the quality of relationships and interactions the individual encounters in the various systems, including the home, school and society at large.

See Section 1.6.3 as well as Chapter three for a discussion on the selection of the participants.

1.9 PRESENTATION OF THE STUDY

The following is an outline of the research study and of the individual chapters:

Chapter One: Introduction

This chapter served as a point of departure for the research and gave a summary of the study.

Chapter Two: Theoretical framework/literature review

In this chapter, the literature relevant to this study is given. The theoretical framework that will inform this study on giftedness is discussed in detail.

Chapter Three: Research design and methodology

This chapter focuses on the research methodology. The research paradigm, as well as the research design, is discussed in detail. Features of qualitative research, the research process, data collection methods, data analysis as well as data verification are given and discussed. The role of the researcher and ethical considerations are also discussed.

Chapter Four: Research findings and analysis

In this chapter, the research findings are outlined and explained. The various emerging themes and categories are identified and discussed. These are used to answer the research question put forward in Chapter one.

Chapter Five: Conclusion and recommendations.

In the concluding chapter, the research findings are discussed and final conclusions as well as recommendations are made. Both the strengths and the limitations of the study are addressed.

1.10 CONCLUSION

In this first chapter, the rationale, the problem statement, the purpose of the study and the research questions were discussed. Attention was given to the research design, the methodology, the data collection methods and data analysis, as well as ethical considerations. Finally, the more prominent concepts informing the study

were examined. In the next chapter, the literature covering giftedness within Bronfenbrenner's bio-ecological model is reviewed. Inclusive education and what it entails is also discussed in Chapter two.

CHAPTER TWO

REALIZING ACADEMICALLY GIFTED POTENTIAL

"There can be no keener revelation of a society's soul than the way in which it treats its children"
(Nelson Rolihlahla Mandela, former president of South Africa).

2.1. INTRODUCTION

The literature review occupies an important position in any research study. In this chapter, research currently being conducted will be explored to contextualize the study. A broad discussion will be given to show how the research project fits into the specific field of study. The literature review may also identify gaps in the extant studies on giftedness (Kaniki, 2006). The review will be presented through a bio-ecological lens, as Bronfenbrenner's bio-ecological model has been chosen as the theoretical framework for the study. An account of the complex nature of defining giftedness will open the discussion. Secondly, the various identification procedures will be presented, followed by an explanation of the effect culture has on conceptualizing giftedness. A detailed discussion on Bronfenbrenner's model will be given, in which giftedness will be explained by drawing on the various systemic levels implicated in the study. Literature in the international and national arenas will be mentioned. An account of the gifted individual and the significant proximal processes and applicable contexts, such as the immediate community, school and home environment, will be presented. A brief conclusion will highlight the essentials of the chapter.

2.2 DEFINING GIFTEDNESS

Giftedness in itself is a rare phenomenon, although it has been recognized since early times (Worell, Olszewski-Kubilius & Subotnik, 2012). It is a complex, multi-faceted, controversial and contested phenomenon in educational literature (Taylor & Kokot, 2000; Perleth, Schatz & Mönks, 2000; Sutherland, 2006). In order successfully to identify gifted learners and to come to an understanding of the lived experiences of these adolescents, it is important to explore the issue of how to define giftedness in the most appropriate way.

Many definitions of giftedness have been formulated by different theorists, researchers and practitioners. These definitions range on a continuum from conservative to liberal (Mönks, Heller & Passow, 2000; Laine, 2010; Callahan & Hertberg-Davis, 2013). Traditionally, giftedness was equated with high general intelligence (IQ), whilst the liberal interpretation supported a multi-faceted view (Mönks *et al*., 2000; Laine, 2010). Despite all these attempts to suitably define it, giftedness remains an elusive and a problematic issue (Shaklee, 1997; Lomofsky & Skuy, 2001; Thompson & Oehlert, 2010; Ziegler, Stroeger & Vialle, 2012). Many authors argue that a unified definition does not exist, as a universal consensus has never been reached (Kokot, 1994; Robinson & Clinkenbeard, 1998; Lomofsky & Skuy, 2001; Jewell, 2005; Ngara & Porath,

2007; Carman, 2013). Some argue that there is no such thing as "a typically gifted child", whether "referring to the intellectually gifted, the creative, or the talented child" (Kokot, 1994, p. 93). Despite international consensus that it is important to recognize and appropriately conceptualize giftedness in order to give academically gifted learners the attention they need, this is still viewed in a negative light as an elitist practice by some and a waste of money by others (Kokot, 1994). Getzels (1981, cited in Kokot, 1994, p. 1) argues that "equal opportunity for all should not mean obstruction of opportunity for any", an argument which should be seriously considered, including in South Africa. Kokot (1994) and Lomofsky and Skuy (2001) agree that perceptions such as the afore-mentioned negate the existence of a gifted population, nationally as well as internationally. Lomofsky and Skuy (2001) further posit that special attention to the needs of such a population is essential to 'self-actualizing' their full potential.

According to Carman (2013, p. 52), many definitions of giftedness are "closer to definitions on intelligence than giftedness", since being 'gifted' is equated with having an unusually high intelligence or cognitive ability. She emphasizes that it is necessary to reach consensus on a definition for giftedness (Carman, 2013). Galton and Terman's definition represents one of the earliest attempts to make a contribution in this regard. For them giftedness was akin to superior intellectual ability. The earliest scientific studies on giftedness were conducted in 1869 by Sir Francis Galton. He investigated the congenital origin of the predominance of giftedness in families, concluding that it was predominantly hereditary (Carr, 2004; Miller, 2013). In 1874 he defined giftedness according to characteristics such as "tremendous energy, good health, independence, dedication, vivid imagination, fluent mental association and purposeful drive" (Kokot, 1994, p. 35). Despite Galton's findings, the question remained whether giftedness was "innate or environmental" (Carr, 2004, p. 145). To this day it continues to be a controversial issue and one relevant to the South African context.

A second ground-breaking study, one which still impacts on how giftedness is defined in Western countries, was that of Terman (1920) who screened about 1500 children with IQs above 140 using the Stanford-Binet intelligence test (Brown, Renzulli, Gubbins, Sigle, Zhang & Chen, 2005; Callahan & Hertberg-Davis, 2013; Miller, 2013). He attributed giftedness to exceptional qualities, such as superior language development, the ability to reason well, possession of good classification skills, as well as exceptional perceptual analytical skills and the ability to synthesize with regard to decision-making skills (Kokot, 1994; Carr, 2004). However, Terman's association of giftedness with good overall adjustment was not supported by later studies (Carr, 2004). Morelock and Feldman (1997) refuted his notion, finding that individuals with IQs higher than 150 had major emotional distress and adjustment difficulties in maintaining healthy peer-relations and developing respectable practices in their school work. This feature will be elaborated on in Sections 2.6.5.1 and 2.6.5.2.

Witty (1958, cited in Kokot, 1994; Robinson & Clinkenhead, 1998; Mönks *et al.*, 2000) in turn conceptualized giftedness more liberally as human activity that was valuable and reflected potential. Giftedness was now seen as more than a quantified measurement; it also included some other special qualities of the person (Kokot, 1994; Carr, 2004). Gowan and Tidwell rightfully defined giftedness as both a "qualitative and quantitative expression of personal potential" (Kokot, 1994, p. 36). Accredited theorists,

inter alia Renzulli and Gardner, explained giftedness in terms of the individual in totality within an environment (Carr, 2004). Giftedness was further explained as being marked by rapid and higher levels of development (Kokot, 1994).

In 1950, Guilford introduced a theoretical model of intelligence that included creative thinking and problem solving as aspects of giftedness. Giftedness was about multiple abilities. This caught theorists' attention. Renzulli, in his search for those factors beyond cognitive ability which play a critical role in the actualization of potential, revised this definition of giftedness. He introduced the *Three Ring Model* (See Figure 2.1) (Brown *et al.*, 2005; Callahan & Hertberg-Davis, 2013) which is "partially based on a hierarchical model of intelligence" (Carr, 2004, p. 146). Renzulli explained giftedness as three interactive circles or *'clusters'*, namely high or well-developed, above-average intellectual ability ("g" or general intelligence), task commitment (varying in high levels of motivation towards task completion), and high creativity (Kokot, 1994; Robinson & Clinckenhead, 1998; Carr, 2004; Brown *et al.*, 2005). According to Kokot (1994), the three *'clusters'* carry equal weight, but the level of task commitment and creativity may fluctuate and intellectual ability may remain more or less constant. Giftedness is therefore 'situation-specific', as it may be more evident in "certain people at certain times under certain conditions" (Kokot, 1994, p. 36). See Figure 2.1 in this respect.

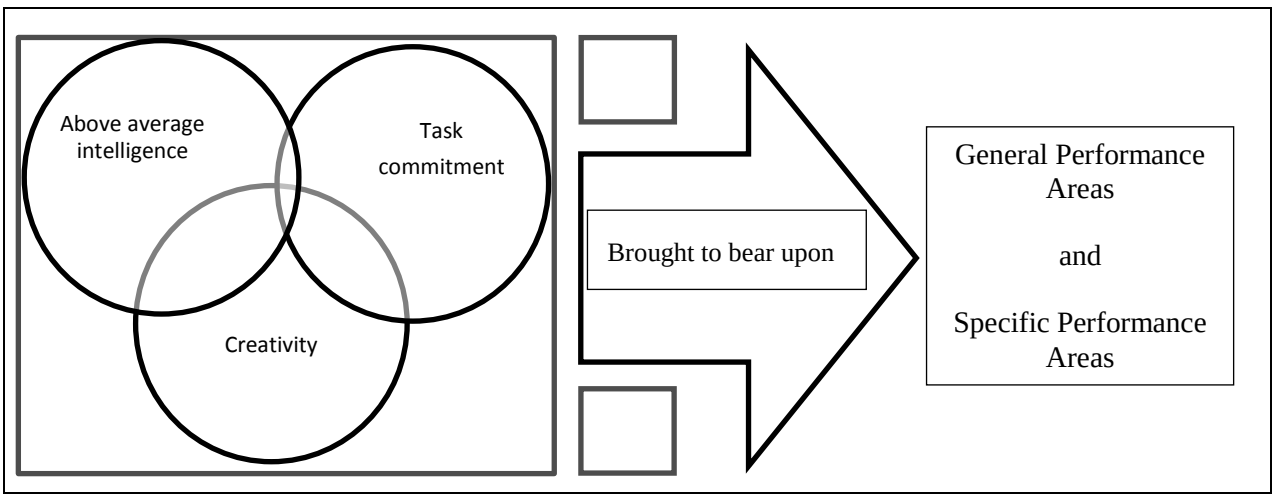

Figure 2.1: Renzulli's graphic definition of giftedness (Kokot, 1994, p. 37)

However, Renzulli's model does not account for gifted underachievers who lack task commitment (Kokot, 1994). Learners who present with these *clusters* need a wide variety of opportunities in their regular educational programs. Both internationally and nationally these opportunities are however often lacking (Brown *et al.*, 2005).

Figure 2.2 explains Mönks expansion of Renzulli's triad model. He expanded the model by adding a second triad consisting of three social contexts, namely the school, family and peer group. In the *Triad Interdependent Model*, Mönks replaced the task commitment factor with motivation, which includes traits such as perseverance, task commitment and the need for achievement (see Figure 2.2).

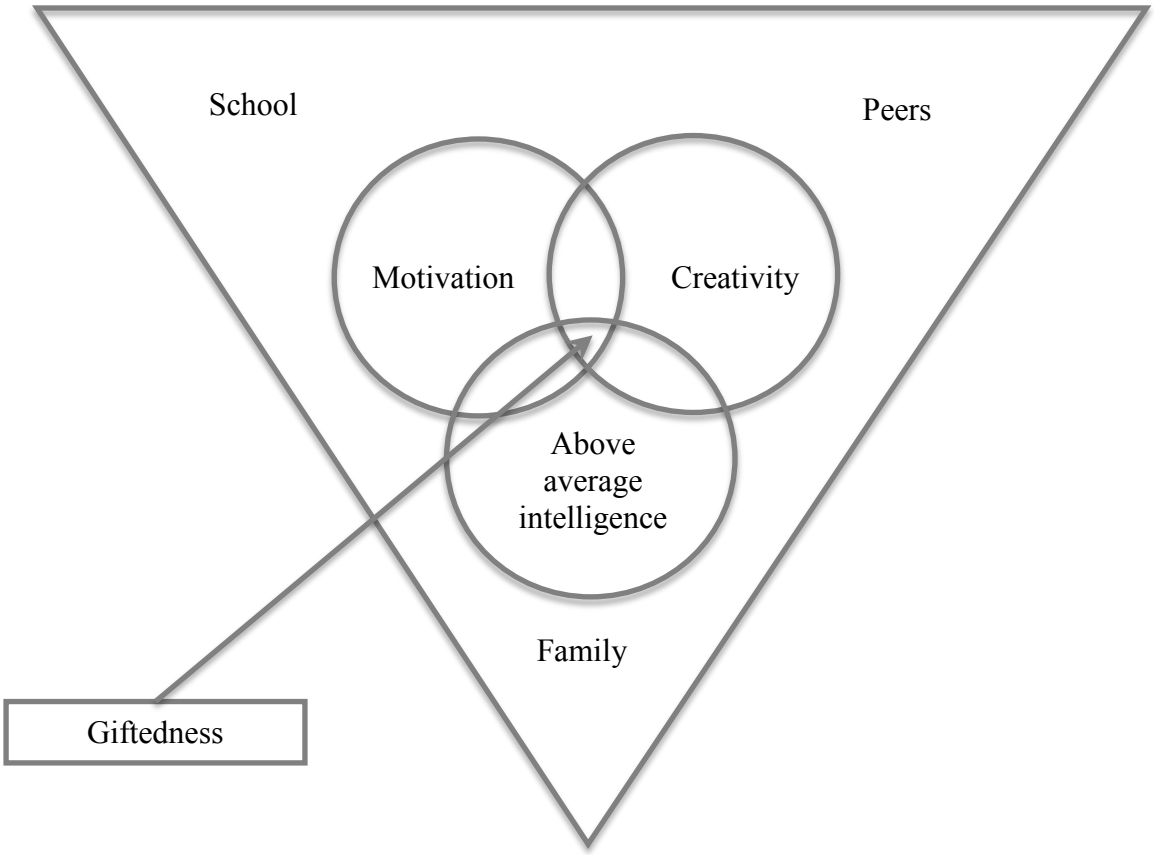

Figure 2.2: Mönks' Triad Interdependent Model (Kokot, 1994, p. 37)

He highlighted the interdependent relationship between the various components of the model, which relates to the interrelated nature of the 'nested-in' systems within the bio-ecological model. Mönks explained that internal and external factors in the social context come into play in forming the individual's personality (Kokot, 1994; Lens & Rand, 2000). Gifted potential is realized when the model's six factors synchronize with an individual's inner drive and when external stimulation and support are provided (Kokot, 1994). This definition of giftedness is particularly relevant to and significant in the complex South African context.

Borland and Wright (2000) support Mönks's model by arguing that giftedness is a human construct that encompasses excellence and potential. It reflects the specific society and the cultural context in which humans are embedded. Giftedness is therefore viewed as "context specific and socially constructed" (Borland & Wright, 2000, p. 589). Both Borland and Wright (2000) and Tannenbaum (1983) advocated a holistic perspective of giftedness. They explained it as an all-inclusive concept which comprises both intrinsic and extrinsic factors, as well as the following five interrelated factors: general intellectual ability ("g"-factor), distinct abilities in a discrete area, special non-intellective qualities that suit the specific area of speciality, a context that appropriately challenges and nurtures these special abilities, as well as chance factors (Kokot, 1994; Sternberg, 2007; De Villiers, 2009). They explained that these five factors "mesh into excellence" (Kokot, 1994, p. 39). Borland and Wright (2000) and Tannenbaum (1983, 1986, cited in Borland & Wright, 2000) contended that the environment (the social context) is an important component of giftedness. The "conceptions of excellence and giftedness are likely to be shaped by the values of the

dominant culture or sub-culture" within multi-cultural societies (Borland & Wright, 2000, p. 589). This notion is relevant to the multi-cultural inclusive school context currently found in South Africa. Borland and Wright's observation will become clearer during the discussion on the impact democracy has had since 1994 on understanding giftedness in South Africa (see Section 2.6.2.2).

Barbara Clark also highlighted the significant role the environment plays in actualizing gifted potential. She suggested that giftedness constitutes the interplay of four integrated functions of the brain, namely thinking, feeling, intuition, and sensation, which are enhanced by a supportive environment. Although giftedness is genetically determined and influenced by the environment, it is also the outcome of a dynamic interactive process (Kokot, 1994). In other words, "it is not only the genetic endowment that results in giftedness; it is also the opportunities the environment provides to develop those genetic programs" (Clark, 1986, p. 6 cited in Kokot, 1994, p. 39). Clark contended that the development of potential might be restricted if interaction between the learner and constructive environmental support were left to happen by chance. If a stimulating environment were provided, the individual's potential would positively be developed (Kokot, 1994).

Thompson and Oehlert (2010) and Clark concur that appropriate experiences allow innate gifted ability to flourish. However, they stress that "the underlying complexity of how genes and environment affect the development of giftedness will continue to challenge researchers" (Thompson & Oehlert, 2010, p. 299). It is fundamental that significant role-players take cognisance of the critical influence the environment has on nurturing and developing gifted potential. This is especially important in South Africa's current inclusive education system. Gagné (1985, cited in Kokot, 1994) presented a new model, the *Differentiated Model of Giftedness and Talent.* He integrated the concepts of multiple intelligences, personality factors, environment and talents. Basic gifts progress into specific talents which emerge from the cognitive interactions the individual experiences with others, and with events, environmental influences and chance factors (Feldhusen & Jarwan, 2000). According to Gagné, a combination of these factors can give rise to high-level performance in various areas of giftedness (Kokot, 1994). Feldhusen and Jarwan (2000, p. 273) suggest that this model is the "most well-articulated theory of giftedness and talent development", and is currently a practical key source for the identification of giftedness in school settings.

Gardner followed the lead of Thurnstone (1938), Guilford (1950) and Tannenbaum (1983) to argue that intelligence is not a unitary construct (Kokot, 1994; Feldhusen & Jarwan, 2000; Carr, 2004). Gardner believes that intelligence is biologically based. He describes giftedness as a "bio-psychological potential to process information in certain ways in order to solve problems or create products that are valued in at least one culture or community" (Woolfolk, 2013, p. 121). It is thus viewed as a specific domain that shows promise, but which may only materialize in a suitable cultural context (Kokot, 1994). Gardner originally distinguished seven relatively autonomous intelligences, namely verbal-linguistic, logical-mathematical, visual-spatial, musical, body-kinesthetic, intra-personal, and inter-personal (Kokot, 1994; Feldhusen & Jarwan, 2000; Brown *et al.,* 2005). Two more domains, naturalist and existential intelligence, were added later. Carr (2004, p. 147) holds that each intelligence "follows a distinctive developmental course". Gardner highlights that the core ability with regard to a distinct intelligence is highly developed and recognizable

within an individual. It can be analysed, evaluated and is measurable with psychometric tests (Kokot, 1994; Carr, 2004).

Gardner's identification of different intelligences has implications for the definition of giftedness and is one of the most popular and widely applied models of human intelligence (Feldhusen & Jarwan, 2000). In order to develop and foster these domain-specific gifts in learners, informed efforts should be made and appropriate educational opportunities should be offered (Kokot, 1994). Brown *et al.* (2005) further suggest that these specific intelligence domains could be used as a means to identify specific giftedness across diverse cultures, and that IQ testing should therefore not be the sole determinant of giftedness.

In line with the theoretical framework that underpins this study, the present researcher argues that a nurturing and facilitating environment, as well as chance factors, can either foster giftedness or suppress the realization of gifted potential. Piechowski (1979, cited in Kokot 1994), likewise suggests that a higher level of advancement and growth is achieved under optimal circumstances, such as facilitating environments conducive to giftedness. He explains that giftedness is comprised of special talents and abilities, as well as over-excitabilities (intense reactions to experiences) (Sisk, 2008). These are expressed as extreme physical energy, exceeding sensitivity to sensory stimuli, extreme attentiveness to dreams, fantasies and images, and a prodigious capacity for empathy, love and understanding of people. He concurs with Gowan's belief that the gifted individual may progress to levels of functioning which exceed the limitations of average humans (Kokot, 1994). This notion points to the need to consider gifted individuals' distinct features, recognizing their uniqueness and accommodating their unique needs in an inclusive education system.

In the light of the above discussion, my definition of giftedness, as employed in this study, sides with Kokot's suggestion of an *interactive eco-systemic* frame for defining giftedness (see Figure 2.3) (Kokot, 1994, 2011; De Villiers, 2009). Kokot (1994, 2011) proposes an *eco-systemic view* of giftedness suitable for the multi-cultural diverse context of South Africa. It allows for all systems to impact on the individual's development, but also acknowledges the innate ability of the individual (Kokot, 2011). She conceptualizes giftedness as follows:

> [Giftedness is] dependent on the interaction between the child and the environment. Accordingly, giftedness can be explained in terms of a system interrelating with other systems. The high ability is seen to be biologically rooted in the child, and develops as an expression of a system of interrelated influences within the child's inner and outer environment. This means that children may be born with the genetic potential for giftedness, but this potential needs to be nurtured to fruition by and within children's life-worlds (2011, p. 511).

Giftedness is, therefore, the innate potential, either "latent or realized", for "extraordinary achievement" in one or more area, as specifically valued within different cultures (Kokot, 2011, pp. 511, 513). Kokot's definition draws on Bronfenbrenner's bio-ecological model (1979) and offers a lens through which the 'outer' and 'inner' realities of the gifted adolescent's personal life-worlds may be viewed and better understood (Kokot, 1994, 2011).

The life-world of the gifted individual constitutes a network of relationships with various systems at various systemic levels. These comprise the intra-personal level, which entails the relationship with the inner-self (the affective, conative or motivational, cognitive and physical aspects of the 'self') and the relationship "with all the people, objects, concepts and other aspects of reality that constitute their environment" (see Figure 2.3) (Kokot, 2011, p. 511).

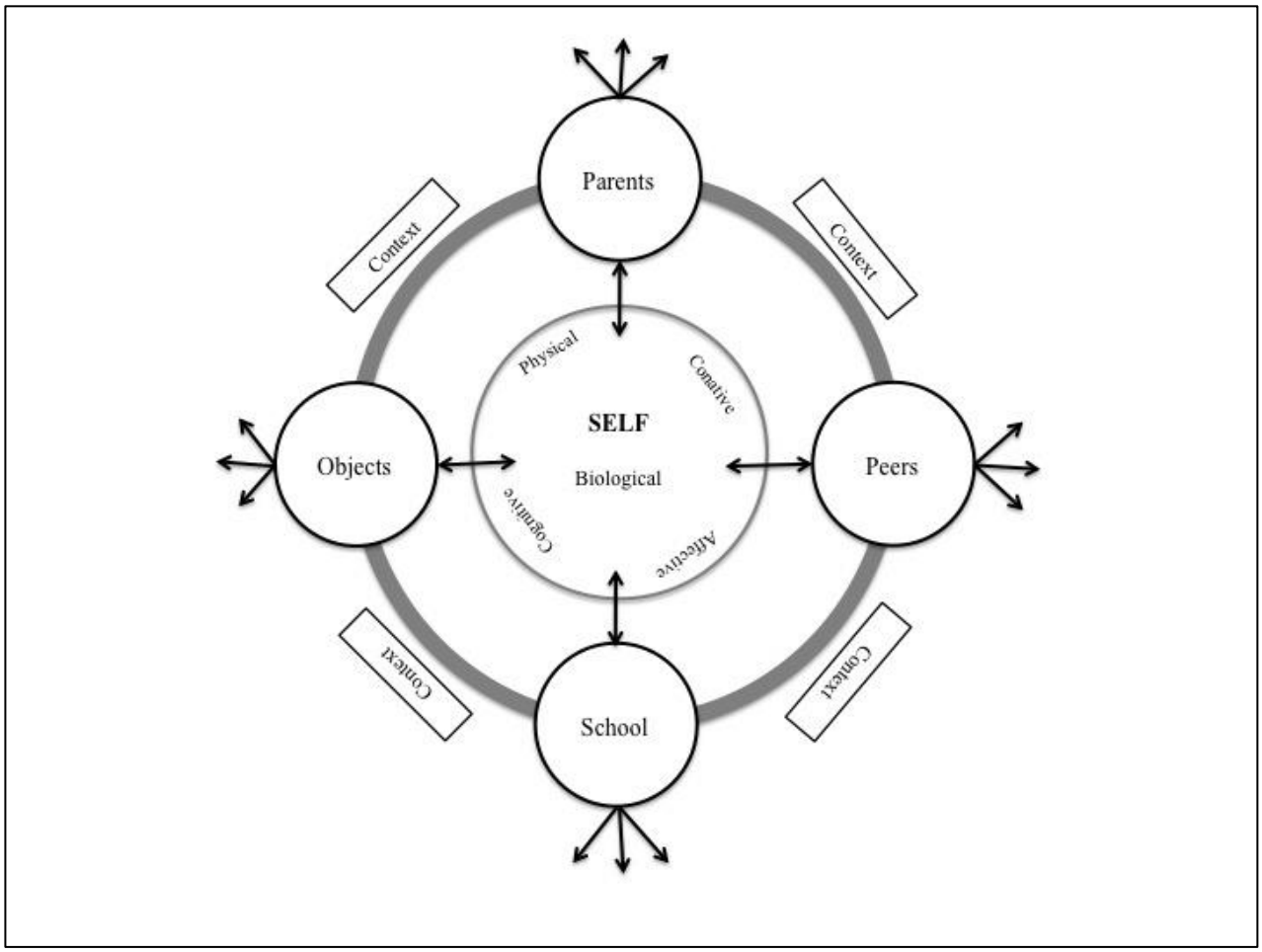

Figure 2.3: Giftedness as an interrelated system (Kokot, 1994, p. 43)

The optimal realization of a person's innate potential is therefore reliant on the quality of relationships and interactions the individual has with various systems, such as the home, school and society. A positive relationship with the inner self, affirming one's abilities as reflected in one's relationship with the outer reality, is a critical and powerful interaction for realizing one's innate potential (Kokot, 1994, 2011).

Given an innate gifted ability present in the neuro-biological structure of the brain, certain favourable conditions are required to actualize and develop gifted potential. "The biological spark" can only be fanned and nurtured when favourable conditions are created, as the interrelated interactions and networking among the systems within broader contexts work together, influencing each other to foster gifted potential (Kokot, 2011, p. 512). In other words, every system plays a part in facilitating and realizing gifted potential. For such potential to be realized, it is essential that it must first be recognized and then be accurately identified.

In conclusion, it is evident that giftedness cannot be explained by a specific tailor-made, one-size-fits-all-sizes definition. Many variables within the different interacting systems may influence a component, which then in turn affects the whole. An eco-systemic perspective on giftedness explains why innate gifted potential may or may not be realized (Kokot, 1994, 2011). This notion of the interrelatedness of systems and the influences various systems and variables within systems have on realizing gifted potential is shown in Figure 2.3.

In inclusive educational practices many aspects relating to identifying giftedness should be considered. These will be discussed in greater detail in the following section.

2.3 IDENTIFICATION OF GIFTED INDIVIDUALS

One of the first purposes of education is to provide young people with "maximum opportunities for self-fulfilment" (Van der Horst, 2000, p. 107; Renzulli & Delcourt, 2013, p. 39). In ancient Greece, Plato appealed to society to nurture the young and 'bright' ones, whatever their socio-economic background (Xolo, 2007). He postulated that children had to be scrutinized "from birth to select all children of gold", irrespective of their descent (Xolo, 2007, p. 203). In support of Van der Horst and Xolo, Kokot (1994) suggests that the identification of gifted learners should form an essential part of an educational program. Identifying gifted ability and facilitating effective educational intervention strategies will enable these learners to develop and express their 'superior' potential, which may lead to increasing "society's supply of persons who will help to solve the problems of contemporary civilization by becoming producers of knowledge and art" (Van der Horst, 2000, p. 107; Renzulli & Delcourt, 2013, p. 39). The identification of gifted individuals is an issue of concern. In spite of the dramatic changes which have taken place in identification procedures and processes since Terman's selections of subjects for his longitudinal study (Mönks *et al.*, 2000), the question "by what means can individuals be accurately identified as gifted?" remains valid (Shaklee, 1997, p. 214). Ngara and Porath (2007) echo this concern. Knowledge and information on giftedness still seem inadequate and identification procedures remain a dilemma (Kokot, 1994).

To develop a more holistic and comprehensive understanding of gifted behaviour as one way of ensuring more appropriate means of identification, characteristics associated with giftedness, as highlighted in the literature, will be briefly discussed. Gifted individuals present with "outstanding prominence" in specific areas, including having a high IQ (above 130), excellence in art or music, and high creative ability (Sattler, 2002, p. 353). Besides these prominent abilities, they also present with specific intellectual characteristics. They thrive on intellectual activity, show curiosity, exhibit analytical and reflective thinking, show early moral concerns, and have the power of sustained concentration (De Witt, 2009). They also present with distinct personality traits, for example insight into complex issues, self-motivation, perseverance, acute self-awareness, sensitivity and empathy, as well as resourcefulness, flexibility and a mature sense of humour. These intellectual and personality qualities seem to be unique to them and may distinguish them from other individuals (Van der Westhuizen & Maree, 2006). Trost (2000) and Sattler (2002) claim that gifted individuals may be identified by means of the above qualities. However, the identification of giftedness

remains complex, as not all gifted individuals present with the same characteristics or the same combination of characteristics.

Internationally, professionals have in the past relied primarily on extremely costly standardized forms of intelligence tests to identify giftedness. Given a lack of valid and reliable research findings on psychometric measures as indicators of giftedness, Perleth *et al.* (2002) question their suitability for the identification of giftedness. Sternberg, Jarvin and Grigorenko (2011), in contrast, argue that standardized psychometric tests can be helpful when used properly and wisely, taking the cultural background of the individual into consideration.

Internationally, IQ tests are still widely used and continue to dominate the Western perspective on giftedness (Mönks & Mason, 2000). In South Africa, IQ testing for the identification of giftedness has been questioned, mostly due *inter alia* to cultural test bias as a result of educational marginalization (Foxcroft, Roodt & Abrahams, 2009). Non-traditional methods have been advocated to address the inequities that may rise when traditional IQ testing methods are used in diverse cultural contexts (Wallace & Radloff, 1992; Borland & Wright, 2000).

There is a sure link between how giftedness is defined and how it is identified (Feldhusen & Jarwan, 2000). The chosen operational definition guides identification and program planning and therefore determines who will be selected (Feldhusen & Jarwan, 2000; Mönks *et al.*, 2000; Ngara & Porath, 2007; Callahan, Renzulli, Delcourt & Hertberg-Davis, 2013). To use a definition that does not account for the role that culture plays in identification procedures would increase "the gap between theory and practice" (Ngara & Porath, 2007, p. 192). Feldhusen and Jarwan (1993, cited in Mönks *et al.*, 2000) propose that a sound identification system should consider the rationale and goals of 'why' the identification is necessary. The purposes and reasons for wanting to identify those who are deemed gifted would then be clear (Shaklee, 1997).

It is essential that the identification paradigm should be applicable to all learners, whether they are from "historically disadvantaged or advantaged groups" (Miller, 2013, p. 52). Sensitivity to diverse expressions of ability is vital (Miller, 2013). Multiple sources and criteria could be implemented to facilitate the identification process; these could include teachers, parents, peer nominations and self-nominations, checklists and individual projects, scholastic/academic achievements, checklists on non-cognitive and/or personality traits, as well as autobiographies (Mönks *et al.*, 2000). Other innovative identification initiatives include creating environments or settings where opportunities are provided for learners to engage in a self-identification process (Mönks *et al.*, 2000). In these 'ability-enhancing-environments', gifted learners would be enabled to demonstrate their capabilities and manifest their gifted potential and skills (Mönks *et al.*, 2000).

Above and beyond the selection of non-psychometric identification methods, educator bias within a specific procedure should be taken into account. When using intellectual or personality characteristics as diagnostic criteria to identify gifted individuals, teachers may be influenced by their own perceptions of 'what' a gifted person should look like and 'how' they should appear. Teachers are the gatekeepers for identifying and selecting gifted individuals (Sternberg & Subotnik, 2000) and according to Trost (2000, p. 318) are

considered "fairly good predictors" of achievement. In view of the position ascribed to teachers, it is vital that their "implicit or explicit theoretical understanding of giftedness" be taken into account, as their beliefs and perceptions may influence their decision-making (Johnsen, 2013, p. 94). This could lead to the exclusion of some individuals who could be identified as gifted.

Identifying those who are gifted at an early age, as well as those from different cultures and diverse socio-economic contexts, is somewhat problematic (Wallace & Radloff, 1992). Sattler (2002) suggests that there is no single system that is best for identifying gifted individuals, but that procedures should be in place to ensure that all gifted learners are given the recognition they deserve (Feldhusen & Jarwan, 2000).

The process of identifying gifted individuals should preferably involve a holistic approach that not only considers the observable behavioural characteristics of the individual but also other relevant factors (De Villiers, 2009). Given our multi-cultural population and the diverse socio-economic statuses of our societies, identification methods and procedures are "a mammoth problem" (Taylor & Kokot, 2000, p. 808). According to Taylor and Kokot (2000), studies indicate that identification procedures relating to gifted individuals in South Africa should consider Dabrowski's Over-excitabilities, as previously explained in Section 2.2, and Gardner's Multiple Intelligences (Sisk, 2008). De Villiers (2009), in turn, claims that teachers in the South African education system will have to rely on informal ways and their own initiatives, observations and activities, to identify gifted individuals. In view of the extant findings, this study will lean heavily on teachers' knowledge of their learners to identify those who are considered academically gifted. For the purposes of this study, a checklist adapted from Sousa (2009) with specific identification criteria will be used to assist teachers in identifying gifted learners.

Giftedness and gifted education are both culture-specific (Taylor & Kokot, 2000). This is particularly relevant to the South African context and society. It is therefore essential to consider the role culture plays in conceptualizing and understanding giftedness.

2.4 CULTURAL INFLUENCES ON GIFTEDNESS

South Africa has a diverse multi-cultural and linguistic population. It displays extremely diverse socio-economic communities within which individuals find themselves. It is essential to consider the effect that these cultural differences may have on how giftedness is defined and how gifted individuals are identified. Hernandez de Hahn (2000, p. 549) suggests that giftedness is "not a quantity that can directly be observed and measured", but is rather a socio-cultural phenomenon. According to Wright (2008), time and space often determine what gifts and talents any given society nurtures. They also determine the way society chooses to identify gifted individuals (Wright, 2008). Thus the way giftedness is interpreted depends on the values and worldviews of each culture (De Hahn, 2000).

The emphasis on culture in the field of giftedness bears an important implication. Human abilities are not absolute and perceived differences in talent and capacity among groups of people are not entirely biologically determined (De Hahn, 2000). Sternberg and Subotnik (2000) also explain that what one culture distinguishes as gifted, may be not be recognized in another. In the African cultural tradition, for instance,

giftedness is equated with exceptional social skills and abilities, since a higher value is placed on socially-oriented cognitive skills (Taylor & Kokot, 2000). Wright (2008, p. 15) therefore argues that giftedness has to be defined culturally, "to reflect the values and the norms of the gifted students' heritage".

Taylor and Kokot (2000) hold that individuals who excel are represented in all cultures. Wright (2008) emphasizes the role culture plays in human performance, stating that the cultural environment deeply influences a child's progress and development; teachers and parents should therefore consider the cultural background of the gifted learner. The literature notes that many able children in South Africa lack a cultural and educational environment conducive to giftedness (Kokot, 1994).

The development of gifted education is a multi-faceted process. Differences in cultural contexts can have a powerful effect on the development of gifted performance (Sternberg, 2007). As previously noted, the surrounding culture, including its beliefs and values, as well as the notion of transitioning between two cultures, therefore need to be considered. The tendency towards acculturation (the need of adolescents to succeed in a First World culture) is specifically reflected in the modern-day adolescent's behaviour and attitude to cultural traditions. Finding themselves in a 'cultural void', these individuals may go unnoticed. Their giftedness may not be recognized in terms of the behaviour valued by their culture, which may overlook them, while giftedness in terms of achievement which is valued by the new culture cannot easily be recognized. This is due to the adolescents' seeming lack of the attitudes, values, knowledge and cognitive functions which are viewed as required components of the new culture's perspective of giftedness (Kokot, 1994). As the world is evolving beyond cultural pluralism, in which each unique culture is validated and celebrated, to an egalitarian society, the diverse gifts and talents of students should be actualized to address world problems (Eriksson, 2006).

In the modern information age and against a background of globalization, much interaction with other cultures occurs, with more sharing of common interests than in the past. Benedict (cited in Taylor & Kokot, 2000, p. 802) reports that "culture shapes man although more slowly man shapes culture as well". At present, because of rapid cultural transition and the adoption of modern values, African families are increasingly keen to support their children in becoming achievers in specific fields. The emphasis is on 'good education', which is perceived as the key to breaking the poverty enslavement cycle (Taylor & Kokot, 2000). Giftedness is viewed as culture-specific and context-specific, as well as socially constructed (Taylor & Kokot, 2000).

Although the gifted construct may be similar across cultures, the way in which abilities and talents are manifested, the procedures which are required to identify gifted individuals in the various cultural groups and the ways they are nurtured, are different (Robinson & Clinkenbeard, 1998; De Hahn, 2000; Sternberg, 2007). The cultural environment can determine whether or not a child is exposed to opportunities for giftedness (Mönks & Mason, 2000). The achievements of bright children may be inhibited by specific cultural values, so "if a child does not fit the cultural stereotypes, he or she is less likely to be recognized as potentially highly able" (Freeman, 2000, p. 574). Csikszentmihalyi (1998, cited in Freeman, 2000, p. 574) concurs that a "genius cannot exist independently of culture: one has to be a genius in something". Cultural factors thus affect what is viewed as gifted and what is not (Sternberg, 2007).

2.5 VIEWING GIFTEDNESS THROUGH A BIO-ECOLOGICAL LENS

2.5.1 Bronfenbrenner's Bio-Ecological Model

The development of giftedness is dependent on "the interactions of the child and the environment", as discussed earlier and also mentioned in Chapter one (Kokot, 2011, p. 511). Human potential is biologically based and its development is closely linked to the environmental context. Biological and ecological factors contribute to the development of potential and the manifestation of giftedness (Sternberg *et al.*, 2011). This notion is supported by Worrell *et al*. (2012), who concur with Kokot (2011) that, in order to develop giftedness within an individual, society as well as the individual at stake must generously invest its time, effort and resources. Ziegler *et al.* (2012) suggest that giftedness should be studied from a holistic, ecological and systemic perspective, whilst all the various and significant contexts in which the gifted adolescent finds him- or herself are considered. Tudge, Mokrova, Hatfield and Karnik (2009) hold that it is imperative in a study that theory, framework and methods as well as analytic strategy be coherent. These components should be connected to the phenomenon under study, since this may result in insights which could lead to the discovery of new connections. According to Swart and Pettipher (2011), the bio-ecological model views human development from a holistic perspective and focuses on all the systemic levels that impact reciprocally on the individual. On multiple systemic levels, these systems directly or indirectly influence the individual's development and learning process (Brendtro, 2006).

Bronfenbrenner's theory of human development is explicitly ecological, emphasizing the "person-context interrelatedness" (Tudge *et al.*, 2009, p. 199). Bronfenbrenner posits that human development takes place as interactions occur between an individual and the various systems in the individual's environment, impacting on the experiences he or she encounters. His theory continually evolved as he revised, renounced and extended the ideas he had presented in 1979 (Tudge *et al.*, 2009). At an advanced stage of his vocation, Bronfenbrenner extended his theory by highlighting the importance of the "biological resources in understanding human development"; henceforth the theory became known as the *bio*-ecological approach (Oswald & De Villiers, 2013, p. 6). Ceci (2006, p. 173) states that for Bronfenbrenner "biological potential was just that – potential". The actualization of human potential depends on persistent, reciprocal interactions between the individual and "objects in the environment" (Ceci, 2006, p. 173). These interactions, also known as *proximal processes*, became a main focus of Bronfenbrenner's concern. He emphasized such interactive *processes* as fundamental factors in development. Thus proximal processes became the core of his philosophy (Tudge *et al.*, 2009). Thereafter, he referred to his theory as the "Process-Person-Context-Time model" (PPCT) (Tudge *et al*., 2009, p. 199; Swart & Pettipher, 2011, p. 11). These four interacting dimensions are key tenets and central to the bio-ecological approach.

Bronfenbrenner believed that "the ecology of childhood is not static, but rather changes over time" (cited in Brendtro, 2006, p. 164). Human development evolves from reciprocal, interrelated, interdependent interactions, as graphically shown in Figure 2.4, below. It is dynamic and ever-changing across space and time. An incident occurring in one system will impact on other systems at the different systemic levels, *inter alia* the macro-, exo-, meso- and micro-levels. Lack of harmony in the interactive proximal and distal

processes may result in an imbalance, which may lead to malfunctioning. In turn, such malfunctioning may result in a failure to actualize innate potential, due to the disparity between the individual and the system. This disparity is also perceived as a mismatch between the individual's potential ability and an environment which may or may not support his or her development and the actualization of genetic potential. In order sufficiently to realize and develop innate, gifted or 'normal' potential, effective intervention should consider adapting the context or system according to the unique needs of the individual (Kokot, 2011).

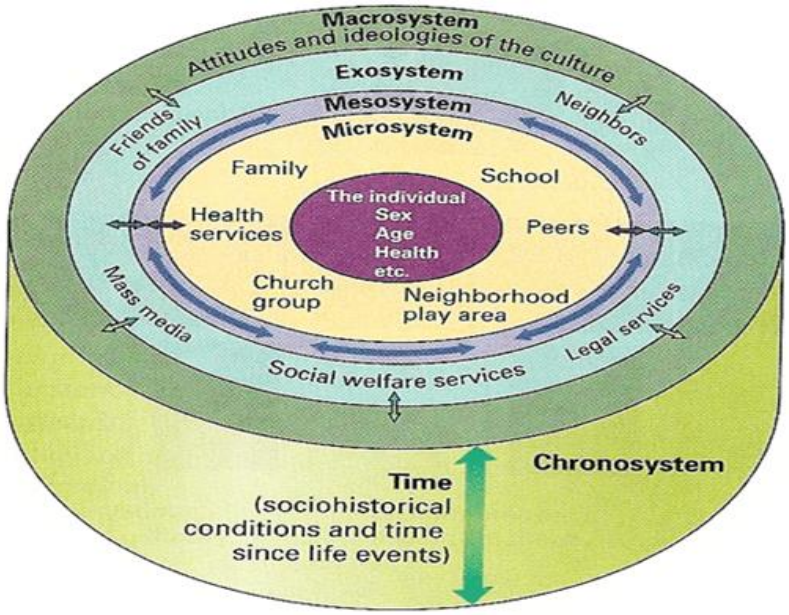

Figure 2.4: Bronfenbrenner's Bio-Ecological Systems Model (Myers, 2011, p. 1)

Returning to the four interactive key dimensions, Swart and Pettipher (2011) mention three key propositions which they claim illustrate the interrelatedness of the four dimensions (see Figure 2.4), namely:

- Human development is the product of a progressive process of complex, reciprocal interactions of the individual with objects and human beings in the environment (Bronfenbrenner & Evans, 2000; Swart & Pettipher, 2011).
- The *time* that an individual has been exposed to the proximal processes and the joint functioning (proximal and distal/distant processes) of the individual's bio-psychosocial characteristics, including the immediate and distant environments and developmental outcomes, should be considered (Bronfenbrenner & Evans, 2000; Swart & Pettipher, 2011).
- The final proposition holds that proximal processes are the "vehicles" or "mechanisms" by which the individual's intellectual, emotional, social and moral potential are substantiated, assuring effective psychological development and actualizing potential (Bronfenbrenner & Evans, 2000, p. 122; Swart & Pettipher, 2011, p. 11).

As this study is embedded in and guided by the bio-ecological model, the four key dimensions will be included and investigated. The first dimension, proximal processes, plays a fundamental role as a "primary

mechanism" in human development and features in the first two aforementioned propositions (Tudge *et al.*, 2009, p. 200).

2.5.1.1 Proximal processes

Proximal processes are the complex, reciprocal interactions which occur on a regular basis between individuals and their immediate environment over an extended period of time and which build on themselves (Papierno, Ceci, Makel & Williams, 2005). Oswald and De Villiers (2013, p. 7) concur that "proximal processes are played out in the systems in which the learner actively participates such as the family, the school or the peer group". Learning and development take place inter-psychologically in these interactions as the individual directly participates in cultural activities with significant and knowledgeable others (see Figure 2.4) (Swart & Pettipher, 2011). Thus, knowledge is transferred as:

> a proximal process involves a transfer of energy between the developing human being and the persons, objects and symbols in the immediate environment. The transfer may be in either direction or both; that is from the developing person to features of the environment, from features of the environment to the developing person, or in both directions, separately or simultaneously (Bronfenbrenner & Evans, 2000, p. 118).

According to Oswald and De Villiers (2013), Bronfenbrenner claims that proximal processes are 'powerful' and may realize innate potential, which in turn may result in effective, dynamic functioning. Proximal processes are therefore dynamic and vary according to the time, place and context in which they occur (Tudge *et al.*, 2009). The individual's characteristics, the social context in which he or she develops, and the power of the reciprocal interactions influence and predict the outcome of the genetic potential that is being actualized (Papierno *et al*., 2005; Donald, Lazarus & Lolwana, 2010). Papierno *et al*. (2005) posit that the match between the individual's genetic ability and the environment may enhance, increase or stunt innate ability. Where, when and how the individual's developmental trajectory begins will significantly impact on the development of exceptional ability, which may differ both qualitatively and quantitatively. Consequently, "the process by which the ability of an individual and the environment of an individual are matched can increase the influence of any initial difference in the ability – whether its source is genetic or environmental" (Papierno *et al*., 2005, p. 317). In other words, similar abilities, whether genetically or environmentally derived, may result in different outcomes for individuals, of realized and actualized potential on one side or stunted potential on the other side, depending on the chances and opportunities they have had. Thus the words of Papierno *et al.* (2005, p. 317), "initial advantage begets future advantage" ring true.

2.5.1.2 Person

Bronfenbrenner also acknowledged and focused on the relevance of the biological and genetic aspects of the second concept of the 'process-person-context-time' model (PPCT), namely the 'person'. The 'person' represents the 'bio' in the bio-ecological approach and is a further fundamental dimension involved in human development. It comprises the innate characteristics unique to the person, as in the case of an academically gifted individual. Such individuals bring these innate characteristics with them into any social situation (Tudge *et al.*, 2009). These characteristics are mainly biologically grounded and influence the proximal

processes and their developmental outcomes (Bronfenbrenner & Evans, 2000; Swart & Pettipher, 2011). Bronfenbrenner divided them into three types, termed *demand* characteristics, *resource* characteristics, and *dispositions* or *force* characteristics.

Demand characteristics are those which act as instant stimuli to another person, resulting in an instantaneous expectation (Tudge *et al.*, 2009). They have the ability to incite or discourage responses from the social environment and to influence initial interactions. Demand characteristics, such as age, gender, skin colour, or physical appearance, may either unsettle or foster the psychological processes of development. They determine the outcome of the resultant proximal process, as well as the direction power is exerted/transferred in the interaction (Swart & Pettipher, 2011).

Resource characteristics are those "bio-psychological liabilities" and strengths that are sometimes induced and that are less apparent, but which influence the individual's ability to efficiently engage in proximal interactions (Swart & Pettipher, 2011, p. 12). These characteristics may relate to mental, emotional, social and material resources, such as previous experiences, skills, intelligence, caring parents, and access to educational opportunities. Resource characteristics represent the available resources either in the individual or in the environment and society. They may impact directly on the resultant proximal processes and the individual's developmental outcomes (Tudge *et al.*, 2009).

Dispositions or *force* characteristics comprise the forces, desires and drives "which can mobilize proximal processes and sustain their operation, or conversely interfere with, limit or even prevent their occurrence" (Swart & Pettipher, 2011, p. 12). For example, it is these characteristics that differentiate one individual from another, and include the individual's temperament, level of motivation and persistence (Tudge *et al.*, 2009). Papierno *et al.* (2005) explain that, despite equal resources being available to them, learners' developmental trajectories will differ because of the presence of force characteristics such as motivation and persistence, which come into play and determine the level of commitment to succeed in a task. Individuals high in force characteristics appear more motivated and persistent in their task commitment and are therefore more likely to be successful than those low in motivation and persistence. Environmental resources may further contribute to the developmental outcome, following on the proximal interactions instigated by these force characteristics.

The distinctive personal characteristics of the significant people in the learner's world and the specific belief systems (on both macro- and micro-levels) should be taken into account in the development of gifted potential, as these factors may enhance or inhibit social interaction between the learner and other important individuals (Swart & Pettipher, 2011). Systems of belief instigate and influence the development of personal characteristics. The emergence of gifted potential depends on the availability of opportunities within a given culture at a specific point in time (chronos) (Swart & Pettipher, 2011).

2.5.1.3 Context

Bronfenbrenner views the environment as "a set of nested structures" which includes, but transcends, the home, school and the community in which the individual spends his or her daily life (Swart & Pettipher,

2011, p. 14). These 'nested structures' are interrelated and constitute four interdependent layers or systems, each of which significantly impacts human development, namely the micro-, meso-, exo- and macro-systems. All these systems interact with the chronos-system. Micro-systems involve the roles, proximal (interpersonal) relationships and patterns of daily activities (refer to Section 2.6.5.1) which shape aspects such as the individual's cognitive, affective, conative and spiritual development (Donald *et al.*, 2010) (refer to Section 2.6.5.2). The meso-system comprises a set of micro-systems which continuously interact with one another, causing change in each system, for example the relations between the individual's family, school, teachers and peers (Swart & Pettipher, 2011). These may inhibit the development of genetic potential or may foster and facilitate self-actualization and the realization of innate potential. The exo-system includes the other systems in which the child is not an active participant or is not directly involved. The exo-system may directly influence those who have proximal relationships with the individual. These include local community services such as the library, health services and the parents' place of work (Tudge *et al.*, 2009; Donald *et al.*, 2010; Swart & Pettipher, 2011). The macro-system represents the outermost layer of the model. It refers to the prevailing social and economic structures, the values, beliefs and inherent ideologies of a particular society and culture (Swart & Pettipher, 2011; Donald *et al.*, 2010). Examples include government policies, legislation, customs of specific cultures and sub-cultures, social classes, forms of discrimination, social justice and equality. The macro-system "envelops the remaining systems, influencing (and being influenced by) all of them" (Tudge *et al.*, 2009, p. 201). The socio-historical-political time which encompasses these systems informs how giftedness may possibly be perceived and received.

2.5.1.4 Time/Chronos

The temporal dimension, also known as the chronos, plays a crucial role in the bio-ecological model. Its complexity and eternal presence should be acknowledged and given attention. Time is prominent in the micro-, meso- and macro-levels, comprising micro-, meso- and macro-time. The development of time affects the interactions between these systems and also influences individual development (Donald *et al.*, 2010). Time is also central to proximal processes. For these processes to be effective, they need to occur on a regular basis over an extended period of time. Unstable environments which are unpredictable over time, such as those of low socio-economic status or marked by violence, minimize the occurrence of proximal processes and may indirectly inhibit the development of gifted potential.

Micro-time refers to that which is occurring "during the course of some specific activity or interaction" (Tudge *et al.*, 2009, p. 201), namely "continuity versus discontinuity" (Swart & Pettipher, 2011, p. 16). Meso-time refers to the consistent, periodic nature of occurrences across broader intervals, for example across days or weeks (Swart & Pettipher, 2011). Macro-time refers to changes or variance in developmental trajectories as a result of specific historical events. Change which occurs across time in different historical and cultural contexts may have large-scale implications at all systemic levels, for the individual as well as for the broader community and society (Tudge *et al.*, 2009; Swart & Pettipher, 2011). Not only is the development of children influenced by the environment, but the environment is also affected by the child as an active participant in his or her own development (Donald *et al.*, 2010).

Bronfenbrenner's bio-ecological model will now be deployed, serving as a lens through which giftedness will be conceptualized and explicated at the various systemic levels. Firstly, the chronosystem and significant shifts that have occurred over time will be presented. As time changes and scientific progress is made and 'new' knowledge is obtained, needs change and perspectives with regard to abstract concepts such as giftedness also change. It is important to understand how these changes impact at grassroots level; for example, what happens in the inclusive classroom, how are learners with gifted potential defined, identified and accommodated? Secondly, on the macro-level both the international arena and the national arena will be explored to assess how giftedness is conceptualized, identified and accommodated in the current education system globally. Thirdly, the exo-level, namely the community contexts, will be briefly reviewed, as it may either offer external resources to foster, facilitate and contribute to the development of gifted potential or pose extreme challenges hindering the growth and development of genetic gifted potential. Fourthly, the micro-level, comprising the significant proximal processes at the interpersonal level, namely the relationship with the school, teachers, peers, family and parents, will be elaborated on. Finally, the intra-personal level, namely the 'person' in all facets, will be presented (explaining and defining the adolescent phase and the significant areas of development, such as the physical, cognitive, affective and conative).

2.6 THE BIO-ECOLOGICAL LEVELS

2.6.1 Chronos-level

The chronos-level encompasses time and all that occurs in time and within various time-frames or phases. These may include the socio-historical, political or developmental life-line or life-story of an individual, or the particular shifts that occur within a specific field as new notions, theories and perspectives are continuously constructed. These influence the current perspectives and trends relating to giftedness. The development of an individual's innate ability is dependent on the specific predominant culture and economic context, as well as the historical time in which the person is situated (Schoon, 2000). Societal circumstances beyond the individual's control contribute considerably to the development of potential. How giftedness is conceptualized and perceived within a specific time and culture is influenced by the socio-historical context of that time, as gifted potential does not develop in isolation. It is within this context that new perspectives and tendencies are construed and put into action. As Schoon (2000, p. 219) puts it:

> The socio-historical context can spark ideas, nourish or suppress talent and is crucial for the evaluation of ideas. The prevailing Zeitgeist, or spirit of the times might cry out for development of a particular ability, while at other times, or in other cultures, the same competence might be considered as of no particular value.

Thus what occurs at the macro-level internationally and nationally within a specific time period directly influences and determines the development and outcome of gifted potential. That which occurs at the macro-level in the international and national domains will now be explored.

2.6.2 Macro-level

2.6.2.1 The international arena

Giftedness evolved from being viewed as a uni-dimensional trait to being recognized as a multi-dimensional construct (Shaklee, 1997). Our thoughts on and views of intelligence have increased, and likewise our understanding of the influences relevant to giftedness has broadened. Aspects such as culture, race, age and socio-economic status inform our perspectives on how giftedness is constructed (Shaklee, 1997).

According to Nolte (2012), the different models of giftedness aim to create a picture of factors influencing the development of a special talent. The change in perspective on giftedness has necessitated a change in the models being implemented to explain it. A systemic approach, such as Bronfenbrenner's model, seems to offer an answer to the limitations in other models. Systemic models acknowledge and recognize giftedness as a process of development, as well as a complex phenomenon evolving within interrelated interactions and interplays of dynamic systems that cannot always be controlled (Nolte, 2012).

However, giftedness is still viewed and explained internationally in terms of the scientific "mechanistic metaphor" (Ziegler & Phillipson, 2012, p. 4). It is 'dissected' into its measurable component parts, which are then viewed together to predict above-average or excellent achievements. Most current models still function within this tradition (Ziegler & Phillipson, 2012). It therefore seems that multi-factorial models on giftedness are currently deemed to be by far the most dominant theories.

A brief account on how socio-cultural factors affect various countries' conceptualization of giftedness and their perception on gifted education will now be presented.

- **United States of America (USA)**

In 1972, the *Marland Report* challenged the US government to make gifted education a priority (Freeman, 2002; Callahan & Hertberg-Davis, 2013). Despite the efforts made, much scepticism remained (National Association for Gifted Children, [s.a.]; Freeman, 2002; Wright, 2008). Currently, gifted students are still viewed as 'academic deviants'. Gifted education is perceived as an elitist practice, as marginalized populations are underrepresented in gifted education programs (Wright, 2008; Laine, 2010). According to the report, *A Nation Deceived: How Schools Hold Back America's Brightest Students* (2004), the education system does not underscore excellence, or provide sufficient challenges to those individuals who are academically gifted. It is reported that America's school system keeps bright students in line by forcing them to learn in a lock-step manner with their classmates (Colangelo, Assouline & Gross, 2004). It seems as if these individuals are held back at the cost of a slowly eroding excellence in the American nation.

- **England/United Kingdom (UK)**

The education system focuses on an inclusive and holistic approach to education in general (Mönks & Pflüger, 2005). The government committed itself to attending to the special needs of gifted children, as stated in White Paper 1997 (Freeman, 2002; Koshy, Pinheiro-Torres & Portman-Smith, 2012). Focus was placed on narrowing the gap between gifted children from lower socio-economic backgrounds and those

from wealthier backgrounds (Koshy *et al.*, 2012). The government also envisioned that every school in England would have an 'able', gifted and talented program implemented by 2007 (Freeman, 2002; Mönks & Pflüger, 2005). However, according to Koshy *et al*. (2012), it became evident that the national program for the gifted and talented raised concerns, as it was administered on an inconsistent basis.

- **Western Europe**

Western Europe has recognized the exceptional abilities of gifted individuals since the time of ancient Greece. To this day, philosophers from these countries have influenced "the way world history has unfolded" (Freeman, 2002, p. 79). In 1994, "a concerted effort across large areas" of Western Europe was launched to promote giftedness (Freeman, 2002, p. 79). The German Ministry of Science and Education, for example, initiated an inventory of gifted education in European schools.

Mönks and Pflüger (2005) reported on the findings of this concerted investigation in 2003. These findings were updated in the following inventory in 2005. According to this document, *Gifted Education in 21 European Countries: Inventory and Perspectives*, national school systems in Western Europe preferred inclusive education as recommended by Spain in the Salamanca Statement of 1994 (Mönks & Pflüger, 2005). A climate of fierce political struggle between the "ideals of elitism and egalitarianism" was still noticed in Western Europe. Gifted education continued to be overlooked by most countries across Western Europe and was "not always legislated for" (Freeman, 2002, p. 79). However, the inventory also revealed the dynamic development of gifted education in some European schools. Since the investigation was conducted after 1994 and the findings reported in 2003 and 2005, the legislative status on the needs of gifted children has become a reality in these countries. The inquiry and report resulted in the universal improvement of teacher training and upgrading in most of the countries (Mönks & Pflüger, 2005).

- **Eastern Europe**

Freeman (2002) mentions that most of the Eastern European countries have a long tradition of nurturing gifts and talents, despite political challenges and Communism. Whatever they felt about political opposition, most Communist countries were fanatical about finding and developing natural talent in children. In addition to the increasing number of special schools (for the arts, mathematics, the sciences and languages) which have already been established, regular schools currently also offer special classes to accommodate the gifted. A variety of extra-curricular activities are also provided. Occasional mentorship systems have been implemented in the secondary schools, which prepare gifted learners to compete at national and international levels. Besides the state education system, public institutions acceded to promoting the development of giftedness and talents. Eastern Europe countries have nurtured their gifted human capital and have become forerunners in doing so (Freeman, 2002).

- **Asian Countries**

The Eastern approach to giftedness views environmental influences as dominant, although they do acknowledge the contribution of innate factors. They believe that everyone is born with a similar potential, but may develop at different rates as determined by one's own drive, power, diligence and persistence to

work and accomplish one's potential, also known as "the worker view", as put forward by Sak (2011, p. 182). Differences are ascribed to individuals encountering different experiences. The role of the teacher in realizing the individual learner's innate potential is indispensable. Both the teacher and the learner work hard together and believe in the individual's ability to be successful. Thus according to the Eastern perspective, all children are viewed as academically able and are expected, with appropriate teaching, guidance and effort, to be successful (Freeman, 2002).

- **Australia**

The overall practices and policies relating to gifted education in Australia are egalitarian and democratic, although some describe gifted education as "elitist, unjust, undemocratic and even intentionally eugenic" (Jewell, 2005, p. 107). Gifted education practices in South Australia take place in regular classrooms, where the needs of all the students are valued and accommodated. The *Australian Association for the Education of Gifted and Talented Children* (AAEGT) promotes awareness of gifted individuals in disadvantaged populations and low socio-economic communities. The AAEGT views gifted learners as one of the nation's assets and endeavours to create an atmosphere of acceptance of these learners (Vasilevska, Urban & Hewton, 2005).

The majority of gifted individuals are educated in "mixed-ability classrooms with little or no differentiation of the curriculum" (Freeman, 2002, p. 127). However, gifted learners are allowed to attend self-contained opportunity classes, where they share their abilities and interests in a fast-paced, intellectually challenging curriculum (Freeman, 2002). The diverse developmental and differentiated learning needs of gifted students are thus taken into account. Focus is also placed on teacher training, including guiding teachers in designing and creating learning programs "that build on the [gifted] children's interests and abilities" (Department of Education and Child Development, 2012, p. 3).

- **Middle East: Israel**

In Israel, gifted children are identified by means of intelligence tests and "account for 1% of the student population" (Shechtman & Silektor, 2012, p. 63). The Israeli Ministry of Education offers several enrichment programs. The most common programs involve segregated classrooms, such as self-contained classes, which operate six days a week in regular schools in various cities (Freeman, 2002; Shechtman & Silektor, 2012). "Weekly one-day pull-out programs in special centers" such as enrichment magnet centres are also offered (Shechtman & Silektor, 2012, p. 137). Other programs encompass extra-curricular enrichment courses, and dual university enrolment where gifted adolescents are accommodated in part-time higher education whilst still at school. University enrichment programs, primarily in subjects such as science and mathematics, are also made available. These programs foster the development of young adolescent entrepreneurs (Freeman, 2002), who are chosen without bias and prejudice by the Ministry of Education. Although the parents make small fiscal contributions to their children's additional education, most receive financial support/assistance from the state (Freeman, 2002). Israel has been mapped as a model nation with regard to developing and challenging gifted potential (Freeman, 2002).

- **Africa**

Freeman (2002) indicates that African socialism informs the perception of African society and holds that giftedness is reflected in social skills, rather than in measurable cognitive skills as valued by Western society. Taylor and Kokot (2000) and Ngara (2008) concur that there is a lack of adequate research on conceptions of giftedness from an African perspective. Given the inadequate research on black gifted learners, the Taylor and Kokot (2000) attempt to position such learners within views of giftedness that are unconnected to African culture.

According to Taylor and Kokot (2000, p. 801), the African perception of the 'way of life' is embedded in the idea of *ujamaa*, which reflects values of "family-hood and togetherness". This notion implicitly requires the community to take responsibility for the upliftment of those in society who have been deprived of opportunities to develop and grow (Taylor & Kokot, 2000). Consequently, educational responsibility is focused on children who have fallen behind and have been disadvantaged and deprived of educational opportunities. Providing opportunities for these learners therefore takes precedence over those who are perceived as gifted and capable of independent study (Taylor & Kokot, 2000). According to Ngara and Porath (2007), who conducted a study among the Zimbabwean Ndebeles, African society perceives giftedness as collectively owned, as they do not consider it as an individualized construct. When it emerges, giftedness is therefore expected to contribute to the community's welfare, benefitting both the individual's family and the community (Taylor & Kokot, 2000; Freeman, 2002; Ngara, 2008).

Moreover, giftedness is mostly viewed as a consequence of being spiritually blessed. It is believed to be present in an individual from birth, but may be removed when misused (Ngara & Porath, 2007). It is an inspirational power which is inborn and brought to fruition when nurtured, as explained by the Shona saying, *ukukhuthaza* – meaning, "make the fruits of the gifts to be seen" (Ngara & Porath, 2007, p. 205). According to Ngara and Porath (2007), Zimbabwean Shona culture holds the belief that everyone is inherently gifted and spiritually blessed. Giftedness is therefore more likely to be present in a low socio-economic class and may be revealed in individuals from humble backgrounds (Ngara & Porath, 2007).

Due to wars and political unrest in the nineties, many African countries were marked by economic instability and lack of economic growth. Owing to these circumstances, as well as the lack of sufficient educational resources, gifted education was seen as an unnecessary investment (Taylor & Kokot, 2000). According to Taylor and Kokot (2000), most African countries did not consider gifted education as a priority on the education agenda. Future possibilities in this field appeared to be limited. Most African countries, with the exception of South Africa, still offer no formal special programming for gifted students (Taylor & Kokot, 2000; Ngara & Porath, 2007; Ngara, 2008). Due to the absence of documented research studies, the region lacks culturally sensitive theories and models that could inform gifted programming from an African perspective (Ngara & Porath, 2007). Ngara and Porath (2007) mention that the Ndebele schools in Zimbabwe seem not to recognize the indigenous conceptions of giftedness in the development of their programs. They are criticized for not offering culturally sensitive gifted programs, since they still rely on Western theories and models in special education. This practice seems to handicap effective gifted education

(Ngara, 2008). Ngara's statement (2008, p. 50) that giftedness does not develop in a "cultural vacuum" therefore rings true.

In view of the foregoing, Freeman (2002, p. 152) suggests that many across Africa associate gifted education with Western elitism, as a lingering effect of the colonial times. Despite this perception, many African families, due to rapid acculturation, view educational progress as a means to escape poverty and other problems, such as being marginalized and disadvantaged. As a result, the recognition of giftedness in African cultures is gaining some ground and is no longer viewed as an elitist Western practice (Taylor & Kokot, 2000). Unfortunately, according to Ngara (2008), it seems that Zimbabwean teachers tend to despise indigenous knowledge. They view it as "backward, retrogressive, authentic and unreliable", since it is unverifiable through scientific methods (Ngara, 2008, p. 140). Such bias may increase the risk of learners who are deemed gifted by their communities not being recognized and supported by teachers in the development of their unique abilities (Ngara & Porath, 2007).

Despite limited African research in this field, Ngara's (2008) doctoral study presented ground-breaking information and insights into the need to accommodate cultural diversity and for sensitivity in gifted programming. These valuable insights may inform such programs from an African cultural perspective and aid in conceptualizing a culturally diverse perspective on giftedness. Consequently, indigenous theoretical frameworks and models may be formulated and established (Ngara & Porath, 2007). This thesis further provides a good basis for formalizing special education programs to develop students' giftedness in Zimbabwe. Moreover, it may help to refocus the attention of other researchers on the vast possibilities and hidden human capital in the unexplored African potential (Ngara, 2008).

In 2010, the *African Gifted Foundation* was founded by Tom Ilube. The aim of the foundation is to establish a benchmark for gifted education and to take the lead in delivering high quality gifted educational opportunities to young people in Africa (African Gifted Foundation, 2010). This will be achieved in collaboration with leading African universities. Their vision is to establish a network of gifted young people across Africa and to "direct the continent and the world's premier universities towards Africa's top 5% gifted population" (African Gifted Foundation, 2010, p. 1). Their focus is to draw attention to African expertise and research on gifted education and to become a catalyst of gifted education across Africa (African Gifted Foundation, 2010).

In summary, the global trend seems to consider the various contextual factors, cultural, external and internal, which influence gifted education. Although inclusive education jargon is used internationally, it still "focuses on the deficits of the education system" (Ziegler & Phillipson, 2012, p. 6). Gifted learners are identified according to personal traits by means of psychometric tests, and support measures are then designed to overcome the deficits in the education system (Ziegler & Phillipson, 2012).

A further dilemma, one that is observed internationally and is evident from the research literature, is that the fundamental nature of giftedness and the way exceptional ability develops continue to be misunderstood (Ziegler & Phillipson, 2012). Trait models of giftedness which focus on identifying gifted individuals according to specific personal traits, without taking external contributing factors such as the broader context

into account, are continually used to design intervention strategies such as curriculum modifications or to withdraw into enrichment programs to address the specific needs (Ziegler & Phillipson, 2012). Each individual's resources, innate, external, contextual or cultural, are to be acknowledged and considered, as each gifted individual is allowed to construct his or her unique learning pathways (Ziegler & Phillipson, 2012). However, educational practice seems to be less advanced than research in the field of giftedness. The research appears to be ahead of what is happening in the various education departments, educational systems and practices, although it still has a long way to go to adequately inform "meaningful education for the gifted" (Ziegler & Phillipson, 2012, p. 4).

Having reviewed giftedness and research on gifted education on the international plane, it is apparent that education in general and education for special needs in particular are no longer isolated matters, as they are "intimately influenced by developments, programs and thinking throughout the world" (Wright, 2008, p. 14). The same tendencies and perspectives with regard to giftedness are specifically noted and reflected in the multi-cultural South African context. The influence of cultural pluralism and diversity as well as giftedness in the South African context will be examined and discussed in the following section.

2.6.2.2 The national arena

With democracy and the paradigm shift towards inclusive education, increased focus was placed on improving the immediate educational circumstances of those disadvantaged and marginalized by the former regime. Policies were developed, documented and implemented to address these problems, but without including any positive developments for gifted learners (Kokot, 2011).

- **Historical overview of the South African political context**

A country's educational development and its perceptions of giftedness are "greatly influenced by the social and political contexts of the time" (Callahan & Hertberg-Davis, 2013, p. 15). External factors such as the political context may therefore influence human perceptions (Oswald & De Villiers, 2013). A brief historical overview is given here of the political and educational trajectory that influenced practices and facilities concerning giftedness and gifted education in South Africa. The journey is marked by the legacy of the former segregated education system. The apartheid education system was exclusionary and unequal. South Africa was one of the first of the few Sub-Saharan countries that did pay attention to gifted education (Oswald & De Villiers, 2013). Such education was however predominantly reserved for a minority of white learners, although research was done to highlight the needs of other gifted learners in the education system (Taylor & Kokot, 2000). In 1943, Biesheuwel presented the first significant study on African cultures and intelligence. In further studies, he focused on the "intellectual potentialities of Africans and the identification and description of research problems in the field" (Taylor & Kokot, 2000, p. 805).

During the 1950s, efforts to accommodate "differences in learners [and] differentiated education within schools" for white children were brought to the attention of educational authorities. Two presidents of the South African Teachers' Union expressed their concerns over the neglect of gifted individuals. The result was that the education system aimed at providing more challenging learning materials for those considered

gifted (Taylor & Kokot, 2000). Between 1955 and 1965, several academic articles in support of education for gifted students were published. As a result, interest in gifted learners grew extensively. The largest longitudinal educational research project ever conducted in South Africa, *The Talent Search*, was launched in 1965 by the Institute for Manpower Research (Taylor & Kokot, 2000; Van der Westhuizen & Maree, 2006). A new education system of differentiated education, promulgated as Law 39 of 1967, was implemented. It was reported that in various provinces, differentiated education was practiced at different levels in significant ways, allowing specific subjects to be administered at a higher grade and including computer science as a seventh subject (Van der Westhuizen & Maree, 2006). In 1969, Jock L. Omond, a former headmaster, also promoted gifted education, although with much opposition. He pioneered and established the *Office for the Gifted and Talented* in Port Elizabeth in 1976, which was discontinued with his death in 1990 (Taylor & Kokot, 2000; Freeman, 2002). His aim was to offer extra-curricular and out-of-school facilities for the gifted and talented. This led to the establishment of "voluntary parent or community associations" and private organizations, benefitting gifted education (Taylor & Kokot, 2000, p. 811; De Villiers, 2009, p. 49).

In 1978, the University of South Africa (UNISA) developed a training module in gifted education for teachers (De Villiers, 2009). The University of Stellenbosch organized and hosted the first National Conference on Gifted Education in 1979, which discussed the specific needs of gifted learners. Due to the "agenda of the apartheid government", the emphasis was primarily on white gifted children (Oswald & De Villiers, 2013, p. 2). The 1980s were considered as an era of educational reform in South Africa. Dr J.S. Neethling was appointed as the "first planner for the gifted" by the Department of Education of the Cape Province (Taylor & Kokot, 2000, p. 806). Selected schools in the Cape Province were given carte blanche "to introduce and develop gifted education", as well as to support other schools in this field (Taylor & Kokot, 2000, p. 806). Various Education Departments of the other provinces now prioritized gifted education and many transformations were implemented.

During this era, the Human Sciences Research Council in Pretoria also made notable efforts to explore the needs of gifted black children (Taylor & Kokot, 2000; Freeman, 2002). The De Lange Committee of Investigation into Education proposed "equal opportunities for education, including equal standards in education, for every inhabitant, irrespective of race, colour, creed or sex" (Taylor & Kokot, 2000, p. 801). A motivational report on the establishment of special schools for black gifted learners was published in 1988 (Oswald & De Villiers, 2013).

In 1984, the second International Conference on Giftedness was again hosted by the University of Stellenbosch (Taylor & Kokot, 2000; Freeman, 2002). The inspiration of the American speakers was noticeable in the programs that were subsequently established. A further International Conference, *Children of Gold*, followed in 1987. This was hosted by the University of Johannesburg, but unfortunately "the unstable political climate of this time restricted overseas attendance" (Taylor & Kokot, 2000, p. 806; Freeman, 2002, p. 152). Because of the volatile political climate, black teachers were boycotted and the attendance of many black schools was disrupted (Taylor & Kokot, 2000; Freeman, 2002).

By the end of the 1980s, the various provincial authorities responsible for the diverse population groups had developed different approaches to gifted education. These included the establishment of various gifted education facilities in the former Transvaal, such as two high schools offering art, ballet and music, extra-curricular centres, parent-driven enrichment programs and outreach-enrichment programs for black gifted learners, such as the *Growth of Children's Potential* held on Saturday mornings in Soweto and Daveyton (Taylor & Kokot, 2000; Freeman, 2002; Van der Westhuizen & Maree, 2006). In 1986, the University of Pietermaritzburg launched a pilot project, *Thinking Actively in a Social Context (TASC)*. This focused on developing meta-cognitive skills and problem-solving abilities among black children (Taylor & Kokot, 2000; Van der Horst, 2000; Freeman, 2002; Van der Westhuizen & Maree, 2006). The program was extended to improve teachers' strategies to facilitate learners in their ability to learn effectively (Taylor & Kokot, 2000). The program was continued after the advent of democracy in 1994.

At the end of the 1980s, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) assigned Mitchell and Williams (1987, cited in Taylor & Kokot, 2000) to investigate the state of gifted education globally. They rightfully reported that South Africa and Israel were leaders in their level of commitment to gifted/talented education. Unfortunately, this was not true with regard to black education in the many disadvantaged and marginalized communities and areas in South Africa.

In 1991, Parliament scrapped the law which classified South Africans by race from birth and the Apartheid system was legally eliminated. A new constitution, based on human rights and democratic principles, was published. The former De Lange Committee's recommendations were fundamental to the Educational Renewal Strategy ("the blueprint for educational policy for the post-apartheid era"), which was published by the Department of Education in 1992 (Taylor & Kokot, 2000, p. 801). In spite of the influence of these recommendations on the Educational Renewal Strategy, gifted education was still regarded as "part of the elitist, white regime" (Taylor & Kokot, 2000, p. 807).

In 1992, Kokot recognized "the need for networking advocates of gifted education throughout Southern Africa" (Taylor & Kokot, 2000, p. 811). She established a newsletter, *Excedo*, which later in the new democratic dispensation became a mouthpiece to inform policy decision-making in education. This newsletter represented the voices of gifted children and their families. Another initiative on gifted education for academically talented black adolescents from families of low socio-economic status was launched in Johannesburg in 1993. The then Rand Afrikaans University (now University of Johannesburg) established a special school, funded by private investors. Their aim was to train future black business leaders. Despite these attempts, research on gifted education declined dramatically after the dawn of democracy in 1994, less was published and many centres for giftedness were closed down (Wallace, 2007; Oswald & De Villiers, 2013). Many enrichment and training programs on giftedness and gifted education were abandoned due to a lack of government funding, and gifted education was rejected as part of the legacy of the previous oppressive and exclusionary regime (Taylor & Kokot, 2000).

- **An overview of the current South African political context**

With the election of the first democratic government in 1994, education was given a high priority, and this period was marked by an intense drive for educational reform (Oswald & De Villiers, 2013). Much attention was given to possible solutions to educational inequalities and the needs of previously disadvantaged and marginalized children. The needs of these children became the key to educational transformation. A unitary system of education was established (Taylor & Kokot, 2000). This was not without its challenges, since nineteen existing fragmented education departments had to be amalgamated into one education system (Oswald & De Villiers, 2013).

Since 1996, a new curriculum, that of outcomes-based education (OBE), as well as a policy of inclusion, has been introduced into schools. This called for a major shift from an exclusionary and unequal apartheid (content-based) education system to a democratic and inclusive system (Department of Education, 1998; Van de Horst, 2000; Van der Westhuizen & Maree, 2006). The policy of inclusion would ensure that all children would receive an appropriate education, regardless of any learning difficulties or barriers to learning. The outcomes were listed in the *Critical Outcomes of Curriculum 2005* (Department of Education, 1997) and the *National Curriculum Statement (NCS)*, which was later revised and reissued as the *Revised National Curriculum Statement (RNCS)* by the National Department of Education (2002). Currently a new curriculum, *Curriculum and Assessment Policy Statements (CAPS)*, is being phased in.

However, due to the lack of sufficient fiscal resources, the educational standard was lowered and the learner-teacher ratio was increased in all classrooms to 35:1. In rural areas, the ratio was often 60 learners to a single teacher (Taylor & Kokot, 2000). This shift illustrated "the government's interpretation of equality in education" (Taylor & Kokot, 2000, p. 804) and it seemed as if the change would enable teachers to teach both gifted and non-gifted learners (Van der Westhuizen & Maree, 2006), but the rapid transformation in education was not always well-managed and support for principals and teachers was often lacking. This led to cynicism and despondency and often to a rejection of the new policy initiatives (Oswald & De Villiers, 2013).

During this time, Kokot founded *Radford House*, a primary school for gifted children (aged 4 to 13), since it seemed as if gifted learners were not receiving adequate attention in mainstream classrooms (Taylor & Kokot, 2000). Meanwhile, the teacher-learner ratio in mainstream classrooms increased and addressing the needs of gifted learners became still more challenging. Teachers were especially challenged by disadvantaged children who presented with poor competence in English and limited academic skills, increasing the diversity of needs in classrooms (Taylor & Kokot, 2000). South Africa is a developing country and struggles to cater for the needs of all its learners (Xolo, 2007). In particular, it lacks enough trained teachers. An array of difficulties, such as the ever-increasing poverty levels, overcrowded classrooms, unhealthy learning environments, lack of appropriate educational support, and language diversity which creates problems for the teachers, pose countless challenges to educational reform (Van der Westhuizen & Maree, 2006; Oswald & De Villiers, 2013). It seems as if policy initiatives are not making the necessary inroads in schools and classrooms. In the light of the above, it is clear that it will be difficult to address the

needs of all learners in an adequate way. Those considered gifted may therefore not receive the appropriate attention in mainstream classrooms (Van der Westhuizen & Maree, 2006; Oswald & De Villiers, 2013).

In 1997, Kokot organized a National Conference at UNISA to address concerns over gifted education (Van der Westhuizen & Maree, 2006; Kokot, 2011). As a direct consequence of the conference, the *National Association of Gifted and Talented Children in South Africa (NAGTCSA)* was founded. Kokot noticed that, although gifted learners continued "to fall under the structures established to provide education for learners with special educational needs (ELSEN) in South Africa", little mention of the gifted had been made in the various recent policy proposals (Taylor & Kokot, 2000, pp. 510-511; Wallace, 2007, p. 204). NAGTCSA, in conjunction with the newsletter *Excedo*, lobbied for the provision of relevant education for gifted learners and for strategies to accommodate these learners in an inclusive educational system (Taylor & Kokot, 2000). Inclusive education as a policy initiative provides a framework for accommodating the abilities and needs of all learners, including those considered gifted (Van der Westhuizen & Maree, 2006). It is against this backdrop of the historical, political and educational trajectory of the development of education in South Africa that a closer look will be taken at what inclusion entails and how it may meet - or not meet, as the case may be - the needs of the gifted.

- **Inclusive education for the gifted**

Inclusion is a 20th century international and national development sanctioned by many policy documents. Shaklee (1997, p. 217) contends that "all children have a right to an education that is challenging, stimulating, enriched and will enable them to develop their abilities". This statement resonates with the values underlying inclusive education and bodes well for those learners who can be considered gifted.

At the 1990 World Conference on Education in Jomtien, Thailand (Education For All [EFA]), an international obligation was made to guarantee that all children would have access to quality education (RSA, 2008; Charema, 2010). This commitment was endorsed by the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the United Nations International Children's Emergency Fund (UNICEF), the United Nations Development Programme, the United Nations Population Funds and The World Bank, who shared in a new vision for education, vowing to make educational provision for all learners by the year 2000 (RSA, 2008).

The ground-breaking World Conference on Special Needs Education in Salamanca, Spain, in 1994, which was signed by the delegates from South Africa, had a significant impact on implementing an inclusive education system in South Africa (Swart & Pettipher, 2011) (see Chapter 1, Section 1.1). Their aim was that schools should be enabled to serve all learners and include all learners, irrespective of their unique and diverse needs (UNESCO, 1994). The rationale for this statement was to enable schools to provide quality education to all, but it was also to be an imperative to society to respect the rights of all humans, changing discriminating attitudes and creating communities that welcomed and celebrated diversity (UNESCO, 1994). The focus for inclusion in South Africa was shifted "to the mainstream school and classroom" (Oswald & De Villiers, 2013, p. 3). These became the site for transformation, as laid down in the 1994 Salamanca

document. Thus an inclusive mainstream school should accommodate all learners, including those deemed gifted, through enrichment, differentiation and the necessary support (Oswald & De Villiers, 2013).

The Education White Paper 6 of 2001 gave the framework for the implementation of inclusive education in South Africa. It focused on the changes to educational structures, systems and learning methodologies that needed to take place to fully accommodate all abilities and learning needs at the different systemic levels. Further important changes were called for in teacher attitudes, behaviour and teaching methods, as well as in curricula and the environment in the classroom. Education White Paper 6 held to a strong human rights perspective, as put forward in the South African Constitution of 1996. It underlined the following principles: respect for diversity, valuing learner participation and social integration, equal access for learners to a single inclusive education system, equity and redress, responsiveness of the community, and cost effectiveness in the implementation of inclusive practices. These principles focus on the values of equity and quality education for all people. Inclusive education emphasizes respect and the acknowledgement that all learners can learn with the necessary support, can learn differently and have different needs and abilities (Department of Education, 2001; Pottas, 2005; Swart & Pettipher, 2011). In order for the South African education system to reflect the above-mentioned principles and values, teachers are identified as the key role-players and facilitators in successfully implementing inclusion. The onus rests on them to accept responsibility for improving their own skills and knowledge, as well as cultivating the new skills needed to facilitate effective inclusive practices (Department of Education, 2001; Oswald & De Villiers, 2013).

In support of the Education White Paper 6, the *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010, p. 6) mentions "the gifted learner as one category of exceptionality" and stipulates that the curriculum should be differentiated and presented in such a way that all learners' needs are accommodated (Oswald & De Villiers, 2013) (see Chapter 1, Section 1.1). The new curriculum initiative, the *Curriculum and Assessment Policy Statement* (CAPS) *for the further education and training phase grades 10 – 12* (Department of Basic Education, 2011), confirms this particular notion of inclusivity (see Chapter 1, Section 1.1). Teachers are expected to plan sufficiently for diversity by implementing various differentiation strategies. Curriculum differentiation is suggested as a valuable strategy to accommodate and provide for the educational needs of gifted learners, but is not without obstacles and challenges. This strategy will be further examined in Section 2.6.5.1, which discusses the adolescent's relationship with the school.

In accordance with the principles of no discrimination and equality in the Constitution (RSA, 1996), Education White Paper 6 emphasizes that all human beings should have access to equal education. However, this does not mean that they should all be treated identically or in the same way (Oswald & De Villiers, 2013). Hutchinson and Martin (1999) and Shaklee (1997) argue for the equitable treatment of gifted learners. However, such fair treatment implies differentiation according to specific abilities and needs.

We have established that at policy level giftedness has been underscored as one of the exceptionalities that should be accommodated and provided for in the classroom. However, there appears to be a gap between what is envisioned and formulated at policy level and what is being realized at ground level (Oswald & De Villiers, 2013). Teachers seem to lack significant knowledge, understanding and the skills needed to assist

these learners to develop and reach their full potential (Xolo, 2007; Kokot, 2011). According to Van der Westhuizen and Maree (2006) and Taylor and Kokot (2000), sufficient educational provision is not being made for gifted learners, despite the fact that they are present in mainstream classes and entitled to meaningful educational opportunities. Gifted education is different, in that it does not equalize, but rather enhances differences and different learning styles and needs (Jewell, 2005; Van der Westhuizen & Maree, 2006).

2.6.2.3 Current research in South Africa

When investigating a specific phenomenon such as giftedness, it is important to consider existing research on the phenomenon in its particular context. This provides a way to locate and make sense of the findings of a study. As previously noted, research on giftedness in South Africa received some attention during the apartheid years. Taylor and Kokot (2000) report that South Africa and Israel led the world, setting an example in their level of commitment to gifted and/or talented education. Since 1994, very little research has been conducted, as reflected in the dearth of available literature on gifted education (De Villiers, 2009). Studies on giftedness, as well as appropriate identification procedures within a multi-cultural context, are sorely lacking (Wallace & Radloff, 1992; Kokot, 1994; Taylor & Kokot, 2000; Van der Westhuizen & Maree, 2006).

However, some efforts have been made within this narrow focus. In 1992, Wallace and Radloff's (1992) report, *Looking at Giftedness in a Developing Country*, gave valuable information relating to diverse cultural perspectives. They cautioned that first-world ideas and identification measures should not be transferred to third-world contexts and stressed the need for financial resources in support of gifted education. In turn, Van der Horst (2000) voiced her concern on behalf of various teachers and parents in South Africa about the provision of adequate educational opportunities for learners who are gifted. She suggested Renzulli's Enrichment Model as a plausible approach to facilitating curriculum differentiation within an inclusive education system (Van der Horst, 2000). In 2002, Krüger and Roos underscored the array of problems underachieving gifted adolescent boys in secondary schools may face. They focused on the implementation of an effective support program for such learners and argued that existing support programs mostly targeted primary school learners (Krüger & Roos, 2002). They suggested an interdisciplinary-team approach to address these concerns. Their intervention strategy and support program showed some positive results, but did not take all the learner variables into account.

Additionally, Van der Westhuizen and Maree (2006) investigated the training of teachers for gifted education. Ten years into democracy, they found the ratio of achieving to non-achieving gifted learners inadequate and stressed the urgency to better equip gifted learners for the challenges of the 21st century. They were concerned that, due to the neglect of gifted learners in the education system, they would not reach their optimal potential. They suggested that "bold steps" (Van der Westhuizen & Maree, 2006, pp. 202-204, 214) were needed to train teachers more effectively to fulfil the needs of all learners in their classrooms. Universities were urged to provide appropriate training for teachers in addressing this educational void (Van der Westhuizen & Maree, 2006).

A study by Surgeon Xolo (2007) drew on the author's own experience as a disadvantaged gifted South African to highlight the plight of such children in this country. He suggested that these learners were desperately in need of recognition and appropriate education, and stressed their value to their respective communities. In a conversation with Belle Wallace (2007), Prof. Kobus Maree argued for meaningful support for the academically gifted. He noted that "very little is being done in South Africa to meet the needs of the highly gifted, especially the needs of the disadvantaged highly talented or gifted" (Wallace, 2007, pp. 193, 196). He emphasized the need for adequate teacher training and called on the government to ensure that the gifted learner was given the necessary educational support. Collaboration of all role-players with a 'top-down-bottom-up' approach to gifted education was seen as imperative (Wallace, 2007).

In 2009, De Villiers investigated the perceptions of South African primary school teachers and principals with regard to the inclusion of gifted learners in mainstream classrooms. She emphasized the effect that an egalitarian and equalizing approach to education had in the field of gifted education. The detrimental effect of this attitude, as well as the overloading of teachers, having to accommodate an array of diverse learning abilities and needs in over-crowded classrooms, left the gifted learner with minimal attention in the classroom. She highlighted the need for adequate support and training for teachers and principals. Finally, she noted the important role these 'hidden gifted treasures' play in a society (De Villiers, 2009).

In a 2012 study, Wissing highlighted the dilemma of underachieving, cognitively-gifted black learners who were not recognized or identified because of "a lack of academic language proficiency" (Wissing, 2012, p. 2). She contended that teachers needed to be supported and efficiently equipped if they were adequately to provide for the specific and unique needs of gifted underachievers who were not linguistically proficient.

In their 2013 article, Oswald and De Villiers emphasized that "gifted learners were most often those who were not receiving appropriate education and support" (p. 1). Their data indicated that "a particular drive for the inclusion of gifted learners was absent in the agenda of education authorities" (Oswald & De Villiers, 2013, p. 1). They suggested that it was now time to ask how South African teachers could best include learners who were gifted in mainstream classrooms (Oswald & De Villiers, 2013). Establishing collaborative partnerships between all the relevant role-players was suggested as one answer to the challenge (Oswald & De Villiers, 2013). This supports Xolo (2007) and Maree's opinions (Wallace, 2007) that all professional and official role-players, as well as the broader community, should be accountable and held responsible for addressing challenges and concerns relating to gifted education. As noted earlier, extant research on giftedness is scarce, but such research as is available points to the fact that, despite the lack of fiscal resources and the effects of the global economic recession, it is vital that research be continued on current trends in and attitudes to gifted education in this country. South Africa has a diverse multi-cultural and multi-linguistic population with diverse socio-economic and educational backgrounds. It is therefore crucial that the 'hidden gifted capital' among the multi-cultural and specifically the disadvantaged population, should be recognized and identified (Xolo, 2007). Despite the fact that these individuals represent a minority percentage of the population, their existence cannot be denied. They are our future leaders, those who will contribute to innovation and progress in many fields, such as science, economics, politics and education

(Kokot, 2011). They exist in every society, irrespective of socio-economic or educational contexts, and also across the spectrum of cultures (Taylor & Kokot, 2000).

2.6.3 Exo-level (Distal processes)

In the Bronfenbrenner model, the exo-system explains the factors that indirectly influence the gifted learner's development, as the learner is not directly involved in them (Tudge *et al.,* 2009). The education system, the parents' places of work, the health services and other external resources within the local community may have an indirect influence on the development of the learner (Donald *et al.,* 2010; Swart & Pettipher, 2011). The socio-economic status of the community will also play a role.

In this study, the influence of the previous apartheid system on certain communities is still evident, highlighting how events within the macro-system can have an effect on the exo-system of a group or an individual. During the apartheid regime, certain communities in South Africa became severely impoverished and disadvantaged, lacking external and fiscal resources to provide sufficiently for their needs. To this day, the legacy of apartheid is still evident in many previously marginalized communities and in the educational provision for certain learners. This will also influence the availability of opportunities for some of the gifted learners participating in this study. According to Freeman (2000), an educational environment of continuous enrichment, in which motivation, curiosity and love for learning are developed, is essential to realizing gifted potential. The socio-economic context, whether affluent or disadvantaged, will either contribute to or inhibit the nurturance and development of gifted potential. Freeman (2000, p. 579) reports that "children from higher SES families [and contexts] tend to have higher IQs". This is due both to the parents' educational accomplishments and to the provision and availability of more stimulating activities, resources and materials. These parents tend to be more involved and to invest more in their children's education and the development of their potential. Since they are situated in more affluent contexts they are more able to provide their children with environments which promote cognitive development. It is apparent that more privileged socio-economic and educational backgrounds of parents offer better opportunities for access to other essential resources that can facilitate, enhance and develop gifted potential (Schoon, 2000). Freeman (2000) mentions that most academically gifted individuals' communal contexts include access to libraries. She also notes that, despite the community's available resources influencing and facilitating gifted potential, "gifted IQ children influence their environments, demanding more learning activities" (Freeman, 2000, p. 579; Schoon, 2000, p. 217). This cumulative effect can also occur in the opposite direction, with those living in disadvantaged conditions being at risk of not realizing their gifted potential (Schoon, 2000).

A broader community context is essential to providing opportunities and allowing access to resources that may address the gifted individual's curiosity and 'hunger for knowledge'. Xolo (2007) and Kokot (2011) contend that gifted learners in South Africa are handicapped by communities, schools and educational systems which do not challenge them. Freeman (2000) concurs with Xolo that when the environmental and communal support and facilities are poor, gifted learners tend to function on a lower level, despite their ability and their resilience in profiting from whatever environments they are in. In contrast, Schoon (2000, p. 221) suggests that, although some individuals are embedded in disadvantaged family backgrounds, they have

the ability to "break the vicious cycle", while "others from privileged backgrounds fail to succeed" in the best of contexts. Thus disadvantaged circumstances and communities may render opposing outcomes, including an increased resilience in withstanding the odds against developing potential and self-actualization (Schoon, 2000).

Borland and Wright (2000, p. 588) in turn postulate that "poverty, racism, class bias – inequity in all its ugly forms – are malignant and insidious forces that can damage people, and children are especially vulnerable". To be born into poverty and to experience the consequences of racism in the first five years of one's life, regardless of an aptitude for academic achievement, may cause the individual to enter school at a developmental disadvantage (Borland & Wright, 2000). Social factors such as poverty and discrimination are challenging to all, even the most resilient children, in ways which can deny them their basic rights, both in our schools and our society (Swart & Phasa, 2011). Poverty is a societal reality faced by many people in South Africa. Social vices such as gangsterism and crime are encountered by a large part of the adolescent population in South Africa. These societal influences may have an adverse impact on gifted learners' development and may cause many to underachieve or to mask their abilities.

2.6.4 Meso-level

The meso-level reflects the interrelations between the various micro-systems, as explained in Section 2.5.1.3 (Tudge *et al.*, 2009; Donald *et al.*, 2010; Swart & Pettipher, 2011). Families and schools are systems embedded within communities (exo-system). These systems influence one another, as they in turn are influenced by the larger social, political and economic realities. Learning and human development do not occur in isolation; healthy and positive collaborative relationships between the family, school and community are fundamental to facilitating and sustaining positive learning experiences for the gifted learner. The active involvement of parents, families and communities in the education of gifted learners would support the widely embraced African philosophy of *Ubuntu* (Swart & Phasa, 2011). Communities with effective inclusive cultures and practices would be built, where the notion of a "whole village taking responsibility for raising a child" would be reflected (Swart & Phasa, 2011, p. 12). Legislation and educational policies also underpin collaborative partnerships to foster inclusive communities. Inclusion focuses exclusively on the needs and well-being of the developing individual (Swart & Phasa, 2011). Collaboration at the meso-level is therefore fundamental to effectively supporting the nurture and development of the gifted learner.

Despite this perception, the literature reveals an assumption that gifted learners are able to realize their potential without any additional assistance. This assumption, that they will realize their full potential without any specialized programs, assistance or collaborative relationships between the significant role-players, is to be contested (Hardman *et al.*, 2005). Xolo (2007) emphasizes that it is imperative for parents, schools and communities to support and collaborate in identifying and developing gifted adolescents. He underscores the value of teachers and communities which believe in them and collaborate to support them in developing their potential. Al-Shabatat *et al.* (2009) concur that the best environment in which to cultivate talents and giftedness is one with collaborative, supportive families, schools and communities.

Collaboration between teachers, parents, families and peers is essential in identifying and fostering giftedness (Mönks *et al*., 2000). The school "cannot fully develop potential without the nurturance that takes place in the home", and parents cannot completely fulfil their supportive roles without the support that the school needs to provide (Mönks *et al*., 2000, p. 856). Shared values form a 'bridge' between the home and school. In other words, when "teachers and parents are in agreement, the path to the child's achievement is smoother", often in non-obvious ways (Freeman, 2000, p. 574). Swart and Phasa (2011, p. 243) concur that "effective collaboration is the cornerstone for forming [equal] partnerships with [parents], families and communities", leading to increased learning opportunities and the provision of mutual support and decision-making. Through collaborative partnerships, the goals and resources relating to the development of the learner's gifted potential are shared and mutual responsibility and accountability are established. A firm collaborative relationship and meaningful two-way communication between parents, school and teachers to facilitate mutual support is imperative if the child's potential is to be developed and explored effectively and sufficiently (Mönks *et al*., 2000; Freeman, 2000).

Positive cooperation is reflected in the child's attitude towards homework and in the amount of work being done, leading to success at school. "Without family support, schools would not be able to help a potentially gifted child to achieve", and vice versa (Freeman, 1998, cited in Freeman, 2000, p. 574).

2.6.5 Micro-level

The micro-level, which encompasses both the inter-personal and intra-personal levels, represents the innermost level of Bronfenbrenner's bio-ecological modelas discussed in Section 2.5 (Swart & Phasa, 2011). This level emphasizes the "person-context interrelatedness", as human development evolves from reciprocal, interrelated interactions (Tudge *et al.*, 2009, p. 199). Such interactions, termed proximal processes, are the main "engines of [human] development" (Tudge *et al.*, 2009, p. 200). Al-Shabatat *et al.* (2009, pp. 121-122) illustrate this interrelatedness of the development of giftedness by positing that "when the child's abilities are truly prodigious, parental and social investments need to be prodigious as well". As the gifted learner is embedded in the various systemic levels, his or her 'person-in-context' development is dependent on the influences of these systems. Thus the different systems shape the context in which the gifted learner is situated. The larger socio-historical system, for instance, can either enhance or inhibit the identification and development of giftedness at the micro-level (Al-Shabatat *et al*., 2009). Regardless of the socio-economic background, the microsystem is likened to an incubator which directs the development of a nation's gifted intellectual capital (Xolo, 2007; Al-Shabatat *et al*., 2009; Kokot, 2011).

According to Bronfenbrenner's bio-ecological model, the proximal processes at the micro-level play a significant role in realizing gifted potential. The reciprocal relationships in the life-world of the individual define the person (shape the personality and identity), facilitate growth and influence what they become, can become, want to become and should become (Lens & Rand, 2000). Ceci (2006) explains that the development of potential depends on the persistent, reciprocal interactions between the learners and objects or people in the immediate environment (see Section 2.5.1). It is through these proximal interactions, which

occur regularly over an extended period of time that the individual begins to make sense of the world and of his or her gifted potential, either actualizing or inhibiting it (Tudge *et al.,* 2009; Swart & Pettipher, 2011).

Kokot (1994) highlights the importance of significant relationships in the life of the individual, as these can fulfil the dominant needs of the gifted adolescent. These basic needs include the need for identity, for a sense of belonging and being loved, the ability to build and establish 'healthy' relationships and be sociable, as well as the need for psychological, material and fiscal provision and aid. The gifted adolescent also needs to be affirmed in his or her value and worth. Recognizing these basic needs, addressing and fulfilling them, plays an important role in actualizing potential (Kokot, 1994). They can only be satisfied in the context of the different types of relationships an individual forms with the school, teachers, peers, parents and family.

2.6.5.1 Proximal processes: Inter-personal level

- **Adolescents' relationship with the school**

The school environment often plays a key role in shaping or hindering the development of individual potential (Schoon, 2000). Oswald and De Villiers (2013) concur that the school is one of the primary systems with which a learner interacts in his or her own development. All activities both within and outside the classroom, as well as the various interpersonal relationships with teachers, other learners and other staff, constitute the school environment (Lens & Rand, 2000). The school is the first structured social entity that the individual encounters where a "sense of industry, the consequences of social and academic competence, competition and power relations" are played out (Schoon, 2000, p. 221). The school system also prepares the individual for the world of work and provides relevant experiences to support his or her transition from school to work (Schoon, 2000).

Manning, Stanford and Reeves (2010) claim that learners who have the ability to excel academically are often neglected or even ignored due to a variety of classroom challenges. These include various myths about giftedness, as well as a lack of understanding of these individuals' specific needs within the classroom. Other factors that cause difficulties are over-crowded classrooms, diminished resources and the manifold needs of the learners in a single classroom (Kanevsky, 2011; Oswald & De Villiers, 2013). Teachers are often overloaded with administrative responsibilities and appropriate learning materials may be lacking. Gifted learners may hide "their giftedness behind a façade of indifference", because of peer pressure or not wanting to be singled out, making it even more difficult to ensure that they receive adequate education (Oswald & De Villiers, 2013, p. 12).

Although inclusive education is an acceptable philosophy, the above realities create problems for the implementation of inclusive cultures and practices in the classroom. Research also points to the fact that teachers often rate themselves as inadequately trained to appropriately enrich the curriculum for the gifted learner (Oswald & De Villiers, 2013).

Tomlinson (2001), Manning *et al.* (2010) and Kokot (2011) stress that, despite gifted learners' curiosity and eagerness to learn, they still require support from teachers who value their potential and are willing and able to employ differentiated teaching to meet their needs. When intellectually gifted learners are not offered a

stimulating and challenging environment exposing them to novel ideas, they may lose interest and develop a negative attitude towards school (Hong, 1999; Kokot, 2011). They may even develop an "imposter syndrome", disbelieving in and doubting their own intellectual ability (Manning *et al*., 2010, p. 146).

Various teaching strategies and models have been suggested to address the need for suitable education for the gifted learner. Curriculum differentiation is underscored as a possible solution to addressing such needs (Oswald & De Villiers, 2013). Curriculum differentiation refers to creating a classroom setting in which learner variance is accommodated and addressed (Tomlinson, 2001; Manning *et al*., 2010; Tomlinson, 2013). This method of teaching respects each learner's need to engage in educational activities relevant to their learning preferences in their zones of proximal development (Tomlinson, 2001; Sousa, 2003; Manning *et al*., 2010; Kanevsky, 2011; Tomlinson, 2013). This strategy aligns learners' distinct characteristics with corresponding learning experiences (Kanevksy, 2011; Tomlinson, 2013). Research, however, indicates that teachers in mainstream education struggle to "differentiate instruction for students of any classification" (Shaklee, 1997, p. 215).

Acceleration and enrichment are further teaching strategies suggested to accommodate the gifted learner in the mainstream classroom. Acceleration entails moving individual gifted learners through the standard curriculum at a faster pace than their peers. It can occur in a specific subject or learning area or in total (skipping complete grades). These learners are promoted to more advanced grade levels not in line with their chronological age (Kokot, 1994). Acceleration can enhance the gifted learner's "zest for learning, reduce boredom in school", and improve and boost their sense of self-worth (Sattler, 2002, p. 360). In this way, they may develop rapidly in their creative and abstract problem-solving abilities. Acceleration remains a contentious issue, however, as it may result in a lack of socializing skills and age-appropriate emotional development, as well as in unilateral development (Kokot, 1994; Kokot, 2011). It should at all times be based on the merit of each unique individual and should also involve parental collaboration (Kokot, 1994).

Enrichment is regarded as one of the main approaches suitable to teaching gifted learners. In contrast to acceleration, it does not entail skipping grades. This strategy involves providing gifted learners with supplementary activities which afford them the opportunity to broaden and deepen their knowledge within a specific learning area (Kokot, 2011). Enrichment encompasses an asset-based approach, as the learners use their strengths to optimize their own development. Thus they may reach outcomes which increase their knowledge and skills. They may increase their originality, analytical ability, inductive and deductive reasoning skills, as well as learn creative problem-solving skills (De Villiers, 2009). Despite these advantages, enrichment may pose challenges to teachers in the inclusive classroom. In addition, the gifted learner may not cooperate and may "baulk at the idea of extra work" (Kokot, 1994, p. 202).

The following enrichment models are suggested to facilitate gifted education. Renzulli's *Enrichment Triad* (Van der Horst, 2000) and Bloom's *Taxonomy of Cognitive Objectives* (Kokot, 2011) are very useful frameworks of teaching strategies to challenge and stimulate the gifted learner in the mainstream classroom. Renzulli views giftedness on three distinct levels, namely above-average thought or intellectual ability, task commitment, and creativity (see Section 2.2). According to his *Enrichment Triad*, the gifted learner evolves

from being an "exercise-doer" to being a "first-hand enquirer" (Van der Horst, 2000, p. 107). The *Enrichment Triad* comprises three types of activities that facilitate learning enrichment. The general exploratory activity motivates and stimulates the learner to greater involvement in research related to 'own-interest' topics. This activity is a prelude to the other two enrichment activities. The second type, the "group training" activity, facilitates higher-level thinking processes (Van der Horst, 2000, p. 108). This provides the learner with the skills and abilities to transfer the knowledge obtained and apply it to new areas of learning. The last type of activity, "individual and small group investigations of real problems" or "individual and co-operative problem-solving", enables the learner to become a real-world investigator and problem-solver, applying the acquired research skills (Van der Horst, 2000, pp. 107, 109). The teacher merely facilitates the learning process, as the learner's role changes from that of a 'learner' to a 'doer' (Van der Horst, 2000).

Bloom's *Taxonomy of Cognitive Objectives* is a teaching and learning strategy that is applicable to all learners in the classroom. According to this model, learning outcomes are achieved at six levels of cognitive functioning, namely knowledge recall, comprehension, application, analysis, synthesis and evaluation. These are arranged in a "hierarchy from less to more complex" (Kokot, 2011, p. 522). Through the application of this model, all learners, and specifically gifted learners, are challenged and assisted to develop optimal higher-level thinking abilities, and "to apply and synthesize knowledge to complex problems" (Kokot, 2011, p. 522). This teaching strategy enables teachers to plan and facilitate meta-cognitive learning to all learners, while posing specific challenges to gifted learners. Both these models can be applied in the inclusive classroom, facilitating optimal creative learning opportunities for the gifted learner (De Villiers, 2009).

A further important aspect of optimizing gifted potential is to establish collaborative partnerships among significant role-players within the learner's own context. Such role-players may include the school, teachers, parents, and professionals from the local community, as well as from the wider society. In a process of collaboration, each role-player comes to share responsibility and resources for promoting gifted education (Kanevsky, 2011; Oswald & De Villiers, 2013). These role-players become equal partners in fostering an inclusive education environment for all learners (Oswald & De Villiers, 2013).

The literature also highlights the need for adequate teacher training in the field of giftedness, especially in the South African context. Attention should be given to the quality of teacher training, both in pre-service and in-service training, as not all teachers are trained to support all the various learning needs in South African classrooms (Oswald & De Villiers, 2013). Classrooms sizes should also be smaller, enabling teachers to help learners in more meaningful ways (Oswald & De Villiers, 2013).

Besides the above-mentioned difficulties, Borland and Wright (2000, p. 589) contend that a "powerful array of forces work to lower the academic achievement" of the minority of academically gifted adolescents. They suggest that the low school performance of previously disadvantaged and marginalized adolescents stems from the former apartheid regime, which imposed inferior schooling on these learners, the effects of which still seem to persist in certain communities. Another factor that inhibits the optimizing of their gifted potential is the job ceiling imposed on them by people of more advantaged contexts who fail to reward them for their educational accomplishments in adult life. These formerly disadvantaged gifted adolescents seem to

develop coping devices which further limit their striving for academic success, both in school and in later life (Borland & Wright, 2000).

An education system that is ill-prepared to challenge its most capable learners (Shaklee, 1997) may leave them unmotivated, frustrated and bored. Without adequate stimulation, these gifted learners may present with behavioural challenges in class. Care should be taken of such learners to ensure that society does not lose out on their potential contributions (Oswald & De Villiers, 2013).

- **Adolescents' relationships with their teachers**

The teacher is a fundamental key role-player in the inclusive education school system and in developing the potential of gifted individuals (De Witt, 2009; Oswald & De Villiers, 2013). Teachers have the primary task of facilitating effective learning and of supporting all learners, whether gifted or with a learning disability, in such a way that they experience it as meaningful and significant. The teacher has the responsibility to create a classroom context which accommodates the diverse abilities and needs of all learners and enhances their self-confidence (De Witt, 2009). In the current South African educational context classrooms are over-crowded and gifted learners seem to be neglected and left to work independently with no assistance. They also tend to become the teachers' 'assistants', helping the less abled ones in class (Kokot, 2011). Teachers are therefore faced with the enormous task of effectively handling individual differences in gifted children under less than favourable circumstances (De Witt, 2009).

Teachers need to be aware of their own feelings and attitudes towards gifted learners in the classroom. According to Kokot (2011), they may experience feelings of inferiority when they engage with highly intelligent learners, often leading to instances where they ‘humiliate’ these individuals in front of their peers. This type of behaviour may cause gifted learners to withdraw, "preferring to be like others in order not to be singled out" (Kokot, 2011, p. 518). Gifted adolescents' seeming affinity with academic work, their natural proclivity towards seeking information and intense involvement in learning may to some extent cause difficulties in teacher-learner relationships (Kokot, 1994, 2011).

Effective communication between the teacher and learner is paramount in facilitating the gifted learner's natural curiosity and desire for knowledge. The teacher should encourage the learner's participation in the learning process. A relationship that is open and shows an understanding of the gifted individual can enhance critical thinking, creativity, and innovative learning. A teacher who is well-prepared, enthusiastic and available may stimulate and appropriately challenge heightened abilities (De Witt, 2009; Kokot, 2011). Finally, collaboration between teacher and learner, as well as with all the relevant role-players, is a cornerstone to realizing successful gifted education practices (Lomofsky & Skuy, 2001).

- **Adolescents' relationships with peers**

At the micro-level, peer relationships are important to the adolescent, as they contribute to general emotional adjustment and provide a source of experience and opportunities to interact and socialize with other adolescents on an equal footing. Identity formation is, furthermore, a critical developmental task during the

adolescent phase, and peer acceptance or rejection may impact on the adolescent's emotional and social adjustment, as well as on interpersonal skills (Kokot, 1994, 2011; Sattler, 2002; Grantham & Ford, 2003).

The proximal interactions of the gifted adolescent with the peer group are determined by various factors, such as the gifted adolescent's distinct characteristics, intellectual ability, gender, home conditions and cultural differences. Considering the role that distinct characteristics play in peer acceptance, it is worth noting that the gifted adolescent's characteristics are likened to "the two sides of a coin" (Kokot, 2011, p. 514). They tend to be socially and emotionally mature, albeit self-critical at times. They seem to be strong-willed and are able to work independently. Additionally, they show a distinct sense of humour and reflect leadership qualities, as well as displaying sensitivity to and an awareness of others' feelings (Kokot, 1994, 2011). Yet, if their strengths are not acknowledged, are misunderstood or not adequately supported, the 'other side of the coin' may show and they may demonstrate less favourable behaviour, while concealing their strengths. They may become indifferent, impatient or critical of others, and this may create relationship problems with their peers. Their humour can become cruel or sarcastic, and they may be non-conforming and lazy, not responding well to guidance, as well as being extremely sensitive to criticism (Kokot, 2011).

The literature offers opposing viewpoints regarding peer acceptance. In some instances the research claims that gifted adolescents are positively accepted by their peers and are socially well adjusted (Berlin, 2009; Lee, Olszewski-Kubilius & Thomson, 2012). In support of this notion, their high cognitive abilities and insight are highlighted (Kokot, 1994, 2011; Lomofsky & Skuy, 2001; Sattler, 2002; De Witt, 2009). They display "socially more mature" and "above average" interpersonal social skills (Lee *et al*., 2012, pp. 91-92). According to Terman (1948, cited in Kokot, 1994), gifted adolescents seem to be more even-tempered, lack moodiness, stubbornness and other psychopathic behaviours, and are socially less maladjusted. They are able to tactfully and unselfishly interact with others, disregarding their own needs while being sensitive to the needs of others (Kokot, 2011). They tend to value and have a greater sense of cooperative and democratic interaction with their peers. Showing leadership qualities at a very young age and portraying a positive self-concept and high esteem, allows them to be more innovative (Lomofsky & Skuy, 2001; De Witt, 2009; Kokot, 2011). They may lead in initiating activities, putting their creative imaginations to work and taking an original approach to traditional ways of doing things, which in turn makes them interesting and fascinating playmates (Kokot, 1994, 2011; De Witt, 2009).

On the other hand, they may also be frustrated in their social relationships, being misunderstood by their peers and may therefore not be successful in developing and building successful social relationships (Kokot, 1994, 2011; Lomofsky & Skuy, 2001; Meece & Daniels, 2008; De Witt, 2009; Jung, Barnett, Gross & McCormick, 2011; Lee *et al*., 2012). Given their intellectual ability and uniqueness, their academic accomplishments may be envied, resulting in them being ignored, feeling different, rejected and isolated (Gross, 1998; Meece & Daniels, 2008; Jung *et al*., 2011; Kokot, 2011; Lee *et al*., 2012). As a result, they may struggle with inter-personal relationships and may find it difficult to create and maintain friendships with same-age peers (Lee *et al*., 2012). Subsequently, they may develop friendships with older children or adults (Lee *et al*., 2012), or may even isolate themselves and turn to reading books, creating a distance

between themselves and their peers (Lomofsky & Skuy, 2001; Meece & Daniels, 2008; De Witt, 2009; Jung *et al*., 2011). Coleman (1977, cited in Kokot, 1994, p. 89) supports the notion that their "academic brilliance is not valued highly by peers". They may further involve themselves in many extramural activities which may even worsen this scenario, neglecting or limiting significant social interaction.

Their preference for interacting with older friends who are more advanced in their interests, activities, emotional and physical levels may pose other challenges to the gifted adolescent (Lomofsky & Skuy, 2001; De Witt, 2009). Having a 'sharp' memory, they may be keen to gain more knowledge, which may further cause negative labelling, non-acceptance and ridicule by their peers or classmates (Leyden, 1985, cited in Kokot, 1994; Lomofsky & Skuy, 2001; O'Connor, 2012). Lomofsky and Skuy (2001, p. 196) mention that the gifted adolescent may face additional challenges, becoming introverted and guilt-ridden, experiencing low self-esteem and depression which correlate with a feeling of loneliness, and may even be "at risk for suicide". Kokot (1994) also notes that some teachers tend to allow gifted adolescents to engage independently in more advanced work, thus removing them from social interaction with their peers. This may result in making learning a rather solitary pursuit (Kokot, 1994; Lomofsky & Skuy, 2001).

A further factor which may negatively affect the development of healthy social relationships is adverse home conditions, such as lack of parental involvement or parental discord and poverty. Gifted adolescents are particularly sensitive to adverse circumstances, causing them to be anxious, experiencing emotional tension and a lack of self-confidence. Consequently they may present with challenging behaviour and problems such as "escapism, anti-social behaviour and avoidance of others" (Kokot, 1994, p. 89). They may be extremely introverted, shy, prefer solitude, tend to "pseudo-intellectualize" (Kokot, 2011, p. 514), and refuse to share the interests of their peers (Kokot, 1994).

To emphasize the important role peer relationships play in the adolescent's life Brendtro (2006, p. 164) highlights that "by adolescence, the peer group can rival and sometimes surpass the family and school as an agent of influence". As noted above, social belonging is imperative. Borland and Wright (2000) suggest that gifted individuals face a painful difficulty. The adolescent can either adopt an attitude and behaviour that facilitate academic success, with the risk of becoming alienated from friends and culture, or may maintain loyalty to his or her peers and culture and sacrifice "prospects for academic and vocational success" (Borland & Wright, 2000, p. 589). Jung *et al*. (2011) call this the *forced-choice dilemma*, which is especially experienced by academically gifted adolescents who fear being stigmatized (Coleman & Cross, 2000; Berlin, 2009). The *forced-choice dilemma* is mostly encountered by academically gifted male adolescents and those individuals of different cultural backgrounds (Jung *et al*., 2011). Such adolescents tend either to isolate themelves and withdraw into independent behaviour or yield to peer-pressure, becoming "anti-intellectual" (Lee *et al*., 2012, p. 91).

Conversely, Lee *et al*. (2012) mention that certain gifted adolescent boys tend to be more popular. They seem to conceal their intellectual image by excelling in sport. The intellectual achievements of gifted adolescent girls, in contrast, seem to be devalued, so that they appear to lose their status. Francis, Skelton and Read (2012) agree that gifted adolescent girls are significantly less popular than boys. Such girls

experience "continual social restraints and tension" between being academically successful and being attractive (Francis *et al*., 2012, p. 67). If they are attractive and good-looking, they are more accepted by their peers (Lee *et al*., 2012), although it seems that adolescent boys do not want their girlfriends to be "smart" (Francis *et al.*, 2012, p. 67). Gifted adolescent girls tend therefore to avoid displaying their intellectual abilities, preferring to downplay and mask their abilities to ensure peer-acceptance (Gross, 1998; Coleman & Cross, 2000).

Reflecting on the above contrasting viewpoints, the conclusion to be drawn is that gifted individuals are unique in the way they interact and form relationships. Their life-worlds are diverse and therefore they do not present with the same characteristics (Ziegler & Phillipson, 2012). The nature and quality of the relationships the gifted adolescent forms will however influence the realization of his or her innate potential. Peer relationships impact on the development of the individual's self-concept and may therefore also influence and affect the relationship with the self (Kokot, 2011).

- **Adolescents' relationships with parents and family**

The relationship with the family, and specifically that between the parent and child or with the child's care-giver, is the first and one of the most important influences in a child's development (De Witt, 2009). The impact the family has on the gifted adolescent's socialization and cognitive development is undisputed. The parents select and offer opportunities and experiences for development and growth (Perleth *et al*., 2000; Schilling, Sparfeldt & Rost, 2006). The relationship first with the mother and then with the father lays the foundation for any other relationships that will follow (Kokot, 1994). The mother's emotions may significantly affect the 'gifted' baby or infant's intellectual growth. Being positive and joyful may encourage the child to explore, while being sad may cause the infant to be inhibited and withdraw (Rudasill, Adelson, Callahan, Houlihan & Keizer, 2013). This also holds true of other developmental phases of the gifted individual (Freeman, 2000).

The relationship between the parents and the child may act as a stressor for the family. The parents may feel inadequate or overburdened by the needs of the child (Schilling *et al*., 2006). How parents perceive or understand giftedness is also important. In any specific era, their perception will generally be influenced by the broader social discourse concerning giftedness (Mudrak, 2011). Parents who value the idea of giftedness may tend to pressure their child to excel and "to fulfil the obligations stemming from his or her giftedness" (Mudrak, 2011, p. 213). Freeman (2000), in support of Mudrak's argument, highlights the disadvantage of being recognized and labelled as gifted. She contends that such adolescents may become "susceptible to extra pressure from parents" to be continuously successful, possibly at the expense of other challenging intellectual, artistic and emotionally satisfying activities (Freeman, 2000, p. 582). This may result in gifted learners developing feelings of failure, a fear of failure, or a fear of disappointing others' expectations, which may lead to negative emotional consequences (Freeman, 2000).

The child's immediate family, in particular the siblings, forms part of the individual's first social network. Heightened sibling rivalry and negative stereotyping may cause problems in these relationships (Schilling *et al.*, 2006). According to Kokot (1994), this may happen especially in disadvantaged socio-economic

contexts, in which individuals tend to have a collectivistic approach to their sense of identity. It seems that the support of a stable family system may reverse the effect of such negative influences and relationships. Sattler (2002) and Rudasill *et al.* (2013) contend that positive relationships with the family characterized by warmth, sympathy and understanding, facilitate the development of high self-esteem and an ability to adjust well emotionally.

The literature supports the notion that the family culture has an influence on the gifted child's development, outlook and achievements. Freeman (2000, p. 573) highlights that "from the beginning the urge to learn, is tempered by opportunity". The family unit is a special context which provides guidance for the adolescent's development and the opportunities to exercise his or her abilities (Freeman, 2000). The literature confirms that parents who spend quality time with their gifted children have a far-reaching effect on their cognitive development. The interaction between the parents and the child becomes an exchange of knowledge and skills and a response to his or her particular needs (Freeman, 2000; Perleth *et al*., 2000). The development and enhancement of meta-cognitive functions, such as executive regulation, are facilitated by and linked to the social relationships in families. The child learns "ways to plan, monitor and check the outcome of problem-solving", which broadens the ability to understand and advances comprehension (Freeman, 2000, p. 576). Parents are therefore viewed as cognitive mediators (Freeman, 2000).

A further essential factor facilitating the development of gifted potential is the parents' sensitivity towards the child's distinct strengths and needs. Sensitive parents will react to the child's specific needs and particular emotional states. The attitudes of the family have a "cumulative effect" on determining whether a high level of achievement is possible and is achieved (Freeman, 2000, p. 573). Through positive experiences in the family the gifted adolescent may develop an awareness, sensitivity and empathy towards others' feelings (Gross, 1998; Lomofsky & Skuy, 2001; Kokot, 2011; Shechtman & Silektor, 2012; Rudasill *et al*., 2013).

Freeman (2000) indicates that the best predictors of giftedness are usually the parents' own cognitive abilities and level of education, as well as their socio-economic status. The family plays a mediating role in the belief systems of children, but each family's belief system may differ from that of the neighbours. The child may therefore "produce great work, not solely as a result of their talent, but as a function of their values and beliefs" as demonstrated by the family (Freeman, 2000, p. 574).

A culturally impoverished background, one lacking an understanding of the dominant language of a specific culture, as is often encountered in the multi-cultural and multi-linguistic South African context, may negatively affect intellectual growth. Adolescents from culturally disadvantaged families usually experience "psychological handicaps in the areas of perception and attention, verbal and intellectual abilities and motivation" (Freeman, 2000, p. 574). At the same time, such families may also offer lively and stimulating environments, which can contribute to fostering the gifted ability of their children (Freeman, 2000). Freeman (2000, p. 574) suggests that the most effective help and support a parent can give towards the development of "their child's future giftedness, is the early encouragement and enrichment of language". Advanced language is usually one of the first things to indicate a high intellectual ability (Freeman, 2000).

In conclusion, "there is no single type of parent-child interaction which is critical to the development of high level abilities" (Freeman, 2000, p. 582). It is the authentic and regular interaction that facilitates gifted potential, providing meaningful stimulation, materials, tuition and a variety of opportunities for experiences and explorations. Taking care that the child or adolescent experiences a safe and secure environment, one in which they can freely explore whilst being unconditionally accepted and appreciated for their uniqueness, is therefore fundamental to realizing gifted potential.

2.6.5.2 Intra-personal level

The intra-personal level at the micro-level represents the innermost centre of the bio-ecological model and the inner self of the individual (Kokot, 2011; Swart & Phasa, 2011). The individual (gifted adolescent) is at the centre of the ecological context and develops with his or her entire "cognitive competence, socio-emotional attributes and context-relevant belief systems" through the reciprocal interactions encountered (Wild & Swartz, 2012, p. 213).

- **Defining adolescence**

In this study, Grade 11 learners will act as participants and as the unit of analysis. These learners are in the adolescent developmental phase, which can be defined as the period of transition between childhood and adulthood (Wild & Swartz, 2012). Louw, Louw and Fern (2007, p. 278) describe it as a "developmental bridge" between being a child and entering adulthood. This phase roughly begins with the onset of puberty and ends with adulthood and the acceptance of adult responsibilities (Wild & Swartz, 2012). It is characterized by biological, cognitive, emotional and social reorganization, aimed at adapting the individual to the cultural expectations of becoming an adult. The adolescent phase is thus earmarked by various developmental tasks, transitions and changes, including identity formation, achieving psychological autonomy and forming close relationships and friendships with the same and opposite sex. These relationships with peers and significant others, known as the proximal processes, encompass their immediate interactive context and are therefore central to shaping their experiences (Wild & Swartz, 2012).

An exact definition of adolescence does not exist, as the boundaries of delineation vary and are not clearly defined (Wild & Swartz, 2012; Louw *et al*., 2007). An adolescent can however be identified as a young person, male or female, who has undergone puberty, but who has not yet reached full maturity (SAGE, [n.d.]). This life-stage is recognized in most societies throughout the world. In South Africa, according to the Constitution, adolescence legally ends at the age of 18 years (Louw *et al*., 2007). For the purpose of the present study, therefore, an adolescent will be defined as an individual between the ages of 11 and 18 years.

Giftedness comprises the inter-relationship of cognitive functioning with the affective, moral and spiritual being, as well as conative traits that contribute to the realization of giftedness (Kokot, 1994). An understanding of these domains is essential to explicating giftedness in the adolescent and will be presented in more detail in the discussion which follows.

- **Physical aspect**

The physical dimension comprises the biological, neurological and genetic composition of the individual. Adolescence is marked by a rapid and dramatic physical growth spurt, as the individual begins to mature physically (Louw *et al.*, 2007). Sexual maturity is reached (Wild & Swartz, 2012). In turn, the adolescent's mental development is marked, with different parts of the brain maturing at different rates. While the part of the brain involved in emotional responses is fully developed and more active, the pre-frontal lobe involved in planning and decision-making may not yet be fully matured. This may make the adolescent more susceptible and vulnerable to risk-taking behaviour and depression (Wild & Swartz, 2012). Kokot, however, claims that "intellectually gifted children often manifest increased neurological cell production, with a richer biochemical composition and increased synapse and other brain activity that promotes thought, concentration, retention [and] attention" (Kokot, 1994, p. 75). Gifted adolescents seem to "display more mature behaviour and decision-making skills" than their peers of the same age (Sousa, 2003, p. 53). (A more elaborate discussion will be presented in the sections on the cognitive and affective aspects). Their ability to integrate information from the environment and to create new information at a quick rate, as well as integrating body and mind, may stimulate high levels of intellectual and physical ability (Kokot, 2011), although in some instances they may sometimes lag behind in physical development (Sousa, 2003). This is an aspect that parents and teachers need to consider in their interactions with the gifted adolescent.

- **Cognitive aspect**

The cognitive domain refers to the intellectual development of the adolescent. During the adolescent phase the child's thought processes begin to change as he or she begins to think about the world in a different way (Wild & Swartz, 2012). The intellectually gifted adolescent's cognitive ability seems more advanced and is the most obvious feature of being gifted (Kokot, 1994). While their superior intellectual potential is recognized and is usually retained throughout their development, it may be masked by underachievement and other behavioural problems (Gross, 1998).

Cognitive ability is the product of the cerebral cortex. This is the part of the brain that is responsible for higher thought processes and functioning. Good nutrition plays an important role in the structuring of the cortex and the brain as a whole (Eysenck, 1991, cited in Kokot, 1994; Sousa, 2003; Kokot, 2011). Contextual factors at the exo-level, such as poverty, unemployment, low SES and poor home environments, may negatively influence the provision of sufficient nutrition. Freeman (2000) agrees that better nutrition leads to improved development in the intellect. When a child is better nourished he or she will function more effectively at a biological intellectual level (Freeman, 2000). It seems, therefore, as if a higher level of intellectual functioning depends not only on a genetic predisposition for exceptional ability, but that good nourishment may enhance the development of giftedness (Freeman, 2000).

The literature indicates that it may be possible to distinguish gifted learners from other learners on the basis of some universal intellectual traits (Kokot, 1994). They usually display a particular desire to acquire new knowledge and to be intellectually challenged. They also tend to have strong intrinsic motivation (Trost, 2000), and may thus be receptive to new experiences (Gross, 1998). In turn, they tend to present with great

energy and enthusiasm, as well as being highly tolerant of frustration when in the process of solving problems (Gross, 1998; Trost, 2000).

They are generally more advanced in language and thought, achieving impressive conversational powers at an early age (Gross, 1998; Trost, 2000; De Witt, 2009). However, some gifted individuals may be late bloomers and slow linguistic developers and readers. Thus the ability to read at an early age may not necessarily be an indicator of giftedness. When they do learn to read, though, this is marked by a "fairly dramatic ease and quickness" (Kokot, 1994, p. 77). As a result of their excellent reading skills, advanced understanding and insight, the intellectually gifted may start to write at an early age and may also present with exceptional mathematical, musical and artistic abilities (De Witt, 2009).

Intellectually gifted individuals have superior comprehension skills, with a recognizably wide vocabulary and a large memory store of information on a variety of different, complex and abstract topics. They present with excellent memory retention and may recall information with the same ease as storing it (Hong, 1999). Additionally, they have remarkably quick and logical thought processes, combined with a natural curiosity, their inquisitive minds leading them to ask many questions (De Witt, 2009). Intellectually gifted individuals can see the links between seemingly disparate fields of knowledge and may develop new innovative viewpoints. They have the ability to explain intricate information intelligibly to others (Hong, 1999; Sousa, 2003). Cognitively, they may challenge their parents, teachers and other authority or adult figures, as they may pose many complex questions. They may also challenge the status quo with regard to conventional social and intellectual norms (Berlin, 2009). The gifted adolescent may show both convergent and divergent problem-solving skills and appear to have a good understanding of cause-and-effect relationships (Kokot, 1994; De Witt, 2009). These cognitive characteristics may aid in identifying the intellectually gifted adolescent.

- **Affective aspect**

The affective domain describes the features of an individual's personality, self-concept, attitudes, values and social skills (Kokot, 1994). The intellectually gifted adolescent's emotional behaviour may vary, as determined by genetic predisposition and contextual influences. Their emotional behaviour may be characterized by perfectionism and an emotional super-sensitivity, with an inclination to over-excitability and more intense emotional experiences (Gross, 1998; Coleman & Cross, 2000; Sisk, 2008; De Witt, 2009; Kokot, 2011). Thus for intellectually gifted individuals, 'feeling' and 'being' seem distinctly to differ from the 'norm'. They may feel this 'difference' just as explicitly as do individuals with disabilities (De Witt, 2009; Kokot, 2011). Being different in their abilities, they may experience an inner tension and as a result may be more vulnerable to stress and emotional distress. This could lead to increased anxiety or to depression (Kokot, 1994, 2011; Gross, 1998; McCoach & Siegle, 2003). Some may choose to isolate themselves from their peers. By being different, they may become the targets either of others' admiration or of their hostility, and may be prone to ridicule (Kokot, 1994, 2011; Lomofsky & Skuy, 2001; De Witt, 2009).

When their heightened intellectual abilities are beyond their chronological age, they may present with uneven development (dyssynchrony), reflected in their emotional and social skills (Hong, 1999; O'Connor,

2012; Shechtman & Silektor, 2012). As previously mentioned, due to the quickness of their minds they may experience conflict with their parents, other family members and adults, as their intentions may be misunderstood or misinterpreted (Gross, 1998; Louw *et al*., 2007). In combination with their heightened emotional sensitivity, this may result in them being easily upset and displaying emotional instability (Kokot, 1994, 2011; Coleman & Cross, 2000; De Witt, 2009). Gifted adolescent girls, in particular, tend to be more depressed emotionally and often underestimate their abilities because of conflict between being academically successful and their femininity (Freeman, 2000).

Factors such as emotional vulnerability, being highly sensitive and vulnerable to stress, may jeopardize the development of gifted potential (De Witt, 2009; Kokot, 2011). This is particularly critical when they do not receive the emotional support needed to develop a sound relationship with the self (Gross, 1998). It may be especially true of individuals who do not experience positive relationships with the role-models who could guide them in their development (Kokot, 1994). It is therefore fundamental that the special and unique needs of the gifted individual are accorded greater attention from significant role-players, such as parents and teachers (Lomofsky & Skuy, 2001).

In contrast to those intellectually gifted individuals who display a heightened emotional sensitivity, with a tendency to stress and distress, others may lead a more stable, affective life (Terman, cited in Kokot, 1994). As mentioned above, they may display more mature behaviour than their peers of the same age (Sousa, 2003). They tend to show a great capacity to empathise and feel compassion for others (Gross, 1998). They are highly perceptive and aware of the subtleties in their environments (Kokot, 2011; Shechtman & Silektor, 2012). They display a sharp intuition and the cognitive ability to accurately analyse affective experiences (Kokot, 1994).

Gifted individuals are also more likely to exhibit an independent character. This may be reflected in a higher level of self-confidence, self-sufficiency and an internal locus of control (Hong, 1998). Their behaviour may be characterized by a greater sense of responsibility and accountability at an early age (Kokot, 1994; De Witt, 2009). The other side of the coin also appears to be true, that these qualities may lead to high expectations of self, with feelings of incompetency and extreme disappointment if ambitious goals are not met (Kokot, 1994, 2011; Mc Coach & Siegle, 2003). They seem to have a highly developed, often quirky sense of humour. Their peculiar sense of humour may sometimes be misinterpreted and not always appreciated (Freeman, 2000). It may be sharp and somewhat thoughtless and they may sometimes need guidance in recognizing its effect on others (Kokot, 1994).

According to Kokot (1994), the education of gifted individuals in South Africa appears rather to focus on cognitive development, neglecting the affective domain. Educational support for the gifted should take a holistic approach to teaching, attending to both their cognitive and affective aspects.

- **Moral aspect**

Gross (1998) suggests that gifted individuals may display advanced moral reasoning. They tend to have a greater sensitivity to moral reasoning and an intuitive discernment of both acceptable and unacceptable

behaviour (Kokot, 1994). They appear to "internalise a personal value system and a sense of justice at an earlier age than others" (Kokot, 1994, p. 79). Although they may have a higher capacity for moral thought, some may still be susceptible to delinquent behaviour when their talents and abilities are misused. Kokot (1994) advises that if society fails to acknowledge and nurture giftedness, these superior abilities and talents, due to frustration and despair, may be used in a destructive way against society. Gifted adolescents may think and behave at a higher moral level than their peers and even their parents and teachers, but this may lead to conflicts when they are expected to abide by conventional rules which appear illogical to them (Kokot, 1994; Gross, 1998).

- **Spiritual aspect**

Some gifted adolescents tend to display an early interest in spiritual matters. Spiritual sensitivity may be displayed in "precocious questioning", where they show a tendency to ask unusual types of questions at an early age about the "universality of spiritual concepts" (Lovecky, 1997, pp. 178-179). Those gifted individuals/adolescents who are more focused on intuition usually display a greater self-awareness and tend to "seek that which is transcendent in [the] self and others" (Lovecky, 1997, p. 182). This transcendental reality is presented as a connection with that which is spiritual or divine and larger than the self (Kokot, 1994). In their experience of being connected to and feeling in harmony with "something larger than oneself", they characteristically display greater levels of faith, compassion, honesty and exceptional truthfulness (Lovecky, 1997, p. 182). They seem to be bluntly honest and, according to Lovecky (1997, p. 179), have "difficulty on the lie scale", since they tend not to engage in behaviour which other individuals seem to take for granted.

In contrast, some gifted individuals may mask their spiritual sensitivity and act more like average individuals. They may resolve spiritual concerns in more conventional ways, tending not to ask any questions about universal, spiritual concepts or experiencing any mystical transcendent moments. Despite representing both sides of the coin, gifted adolescents have a unique way of perceiving their world and their relationship to it. They also feel differently, having a field of subjective experiences which needs to be explored and supported (Sisk, 2008).

- **Conative aspect**

The conative dimension comprises the will (motivation) of the individual. Gifted individuals tend to be more conscientious, enthusiastic, and dedicated, and to display more whole-hearted participation in various activities (Kokot, 1994). They have a desire for excellence in a wide field of interests which exceeds that of the average individual. They may display interest in a wide range of subjects and activities which can lead them to be uncertain about their subject choices and future careers (Kokot, 1994). Gifted adolescents of both sexes seem to be more interested in abstract than in practical subjects. Despite their wide range of interests and desire for excellence, giftedness remains a choice that the intellectually gifted individual can either wilfully actualize or not (Kline, 1991, cited in Kokot, 1994). The choice to actualize innate potential requires a positive self-concept and a healthy relationship with the self (Gross, 1998). Various factors may affect the choice for self-actualization. To develop potential, affective characteristics, such as emotional maturity and

stability, a strong inner sense of self and the willingness to take risks need to be present. In accepting the self as being unique and different, the intellectually gifted adolescent may demonstrate the confidence and sense of security essential for the development of the conative dimension (Kline, 1991, cited in Kokot, 1994). McCoach and Siegle (2003) suggest that a positive self-concept influences self-perceptions, which in turn may determine the type of challenges and activities that will be selected and engaged in. It may also determine the persistence exhibited in these activities. Creating and providing a space where they are accepted for their uniqueness may foster their distinctive need for imaginative and creative self-expression (Kokot, 2011).

- **Identity formation and self-concept**

Identity formation is a crucial developmental aspect of the adolescent phase. The individual forms various identities throughout his or her life-span (Gross, 1998; Wild & Swartz, 2012). These identities are formed in reaction to the environment and are determined by how one perceives the people and things in his or her life-world (Wild & Swartz, 2012). This reaction to, and interaction with the environment affects self-perception and leads to the individual's identity in the specific context or relationship. Therefore, as Kokot (1994, p. 85) contends, the self-concept "consists of a constellation of attitudes towards all the identities that make up the self". She adds that these identities may be positive or negative.

Gross (1998), in support of Kokot, mentions that identity formation and self-acceptance may be complex for gifted adolescents because of their unique features, including being emotionally sensitive and viewing the world and ideas from different angles than the norm. Grantham and Ford (2003) highlight the fact that identity formation is not always positive across cultures. They contend that gifted adolescents from diverse ethnic backgrounds tend to find it quite negative and problematic, experiencing much psychological and emotional distress. It is critical, therefore, to consider this aspect within educational settings (Grantham & Ford, 2003).

According to Gross (1998, p. 168), the intellectually gifted adolescent's particular "drive for identity, autonomy and achievement may conflict with the need for intimacy". The need for intimacy and for acceptance by their peers may result in adolescents developing a 'false' sense of identity or taking on "alternative identities", and losing touch with their innermost feelings and beliefs (Gross, 1998, p. 172). On the other hand, should the gifted adolescent not conform to society's pressures this may lead to a failure to establish warm and supportive relationships, which in turn can have a negative effect on identity formation and result in social isolation (Gross, 1998; Louw *et al*., 2007). This inability to develop a secure and mature perception of one's identity may inhibit the development of gifted potential. Furthermore, having an unrealistic opinion or perception (positive or negative) of oneself may also constrain the realization of one's actual potential. Gifted adolescents need norms by which they can measure their own identity and growth (Gross, 1998). This can be made possible through facilitating significant proximal processes with sympathetic significant others and understanding, accepting peers (Kokot, 1994).

2.7 CONCLUSION

Although giftedness is a recognized phenomenon, conceptualizing, defining and identifying it is a complex and contentious issue. Different countries and cultures have different perceptions of giftedness, and there is no universal consensus. The African perspective requires further research. The socio-historical and political legacy in South Africa has significantly influenced the educational provision in the country with regard to gifted education. It is noted that academically gifted adolescents need specific educational interventions to develop their potential. Although these teaching strategies are in use internationally, provision for learners who are considered gifted seems to need attention in South Africa. Chapter three will focus on the research design and methodology which support this study.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The overarching purpose and aim of this study was to address the unique and specific needs of academically gifted adolescents in our current education system. The study offered an opportunity for academically gifted Grade 11 learners to voice their lived experiences and to identify their specific support needs within the school context, providing a greater insight into how giftedness is understood and valued in a multi-cultural South African context.

The following sub-questions, put forward and highlighted in Chapter one, guided the investigation:

- What contributes to academically gifted Grade 11 learners' success whilst focusing on the various systems and proximal processes within their contexts?
- What are the specific support needs of these gifted learners which will allow them to optimize their potential?
- Are these needs sufficiently provided for in the current inclusive education system in South Africa?

In this chapter, I will describe the research procedures that were followed in seeking answers to the specific research questions. This involved applying a specific research paradigm and research design, as well as research methodology. The features of qualitative research will be discussed, followed by an explanation of the procedures followed to identify the research setting and to select the research participants. The various data collection methods, the data analysis techniques, as well as the data verification strategies, will then be given. Specific ethical considerations which were taken into account and adhered to during the study will be reviewed. My role as researcher in the complete investigation process will be presented throughout the chapter.

3.2 RESEARCH PARADIGM AND EXPOSITION

A research paradigm is a broad framework that encompasses the purpose and process of a research study, as discussed in Chapter one, Section 1.6.1. Paradigms are systems of understanding which vary, depending on the scientific methods to which they subscribe. Comprehensive by nature, they are commonly viewed as "system of interrelated practice and thinking" (Terre Blanche & Durrheim, 2006, p. 6). Thus a paradigm describes the nature of the researcher's enquiry taking into account certain ontological, epistemological and methodological assumptions.

As mentioned in Chapter one, Section 1.6.1, the qualitative interpretive-constructivist paradigm was used to map this research study. Ontological assumptions within a chosen paradigm identify the nature of the reality

that is being investigated, as well as raising questions concerning "the nature of the human being in the world" (Denzin & Lincoln, 2005, p. 183). They also specify what can be known about this reality. Ontological factors in the interpretive-constructivist paradigm assume that the multiple realities and meaning-makings of a single event or concept are socially and internally constructed (Durrheim, 2006; Merriam, 2009). No single, observable reality exists (Merriam, 2009). These multiple realities, constructed by the participants within their unique contexts, are based on their subjective experiences of the social interactions they encounter in their diverse contexts (Durrheim, 2006). The subjective experiences of the individual participants are essential to the research investigation. The emphasis is on the participants' lived experiences (which are subjective by nature), as well as on meaning-making through interpretation of their experiences.

The term 'epistemology' derives from the Greek word "episteme", meaning knowledge (Henning *et al*., 2004, p. 15). Epistemology is the branch of the philosophy of knowledge which describes the relationship between the researcher or inquirer and "what can be known" (Terre Blanche & Durrheim, 2006, p. 6). In the interpretive research paradigm, the researcher is the main instrument of data collection and does not look for control over contextual or situational variables (Terre Blanche, Kelly & Durrheim, 2006; Merriam, 2009). Instead, he or she interacts with the participants, listening carefully to what they share and making use of "qualitative research techniques to collect and analyse information" (Terre Blanche *et al*., 2006, p. 274). The role of the researcher is thus that of a co-creator in making sense of the participants' experiences (Henning *et al*., 2004). He/she also endeavours to gain a deep level of understanding of the participants' experiences in their everyday environments, taking into account the significant influences of their unique contexts, backgrounds and proximal processes.

Methodology refers to the best practical means a researcher can apply to study what is believed to be known. It concerns the specific methods which can be implemented to "try and understand the world better" (Henning *et al*., 2004, p. 15).

For this study, I accepted that the participants would construct knowledge through their unique beliefs, values and reasons (Henning *et al*., 2004). Giftedness would therefore be interpreted, understood and influenced by their own experiences and interactions within their social contexts (Henning *et al*., 2004; Durrheim, 2006). It was important to understand how they viewed giftedness from their frame of reference and also in what way they made meaning of their experiences of being academically gifted in their unique contexts (Henning *et al*., 2004). The above meant that I needed to be sensitive to the role their contexts played in their meaning-making processes and attempt to understand giftedness through the meaning attached to it by the Grade 11 learners themselves as participants (Henning *et al*., 2004). Thus, I had to "adopt an inter-subjective or interactional epistemological stance" towards the meaning-making they allocated to their unique experiences of being academically gifted (Durrheim, 2006, p. 7). In this process, I was not separate from that which was being investigated, but was considered "an 'insider'" (Henning *et al*., 2006, p. 22), taking an "emic perspective", "seeing [giftedness] through the eyes of" the Grade 11 participants (Babbie & Mouton, 2010, p. 271).

3.3 RESEARCH DESIGN

I employed a descriptive, qualitative case study as research design (Babbie & Mouton, 2010). This acted as a strategic plan, framework of action or blueprint for the study (Henning *et al*., 2004; Durrheim, 2006; Babbie & Mouton; 2010). Such a design locates the researcher in the world of experience (Denzin & Lincoln, 2005). Metaphorically it is a "bridge" which links the research questions with the execution of the project (Durrheim, 2006, p. 34). It focuses on the end-product as it guides the methodology used to collect and analyse data (Henning *et al*., 2004; Durrheim, 2006). Such a research design aims at maximizing the validity of findings and ensuring that the study "fulfils a particular purpose" within the bounds of the available time and resources (Durrheim, 2006, p. 34).

In qualitative research, the design of the study is usually "more open, fluid and changeable", flexible and non-sequential (Durrheim, 2006, p. 35). Due to the changes which occur during such research, the design is regarded as an iterative process, marked by repetition (Henning *et al*., 2004; Durrheim, 2006). It may commence with the proposed research question, but during execution the original design may be adjusted, allowing changes to occur. Valid, pragmatic changes may lead to adaptations to the original design and even to the initial research question. It is therefore not only technical concerns which influence the development of the final research design, but also pragmatic considerations (Durrheim, 2006).

A further important aim of the research design is to establish and ensure internal coherence between the design type and the various research components, such as the research question, the literature review, the theoretical framework and discussion (Henning *et al*., 2004). In other words, "goodness of fit" is essential between the components (Henning *et al*., 2004, p. 33). The 'fit' between the four dimensions mentioned in Chapter one, Section 1.6.3, the **purpose** (Chapter 1, Section 1.4), the theoretical **paradigm** (Section 3.2), the **context** in which the research is situated in (Section 3.5), as well as the **techniques** (Section 3.4), informed the development of the research design for this study (Durrheim, 2006).

The case study as research design is commonly used in qualitative research. In taking the decision to use a case study, the researcher is concerned with "what is to be studied", rather than making a methodological choice (Stake, 2005, p. 443; Merriam, 2009; p. 40). The "what" that is being studied is known as a "bounded system" (Merriam, 2009, p. 40), as mentioned in Chapter one, Section 1.6.3. The case may comprise a single person, a group or an organization. That which is being studied is "fenced in" within specific boundaries (Merriam, 2009, p. 40).

Stake (2005) distinguishes three types of case study, intrinsic, instrumental and multiple or collective. An intrinsic case study focuses on a particular "bounded system" or case as the primary interest. According to Merriam (2009), it does not increase one's understanding of an abstract concept, nor does it enhance theory building. The **collective instrumental case study type**, as employed in the current investigation, integrates the characteristics of an instrumental study with those of a multiple or collective case study. An instrumental case study focuses on gaining insight into a specific phenomenon, issue or abstract concept, in this case giftedness, "to redraw a generalization" (Merriam, 2009, p. 48). In this study, the 'case' took a secondary place of interest. It only played a supportive role in facilitating my understanding of giftedness (Stake, 2005).

A multiple or collective case study, however, focuses on several separate cases which are jointly studied to investigate a particular phenomenon.

To investigate the lived experiences of academically gifted Grade 11 learners, I employed the collective case study approach, in which six single, instrumental case studies were investigated separately and then jointly, to gain a better understanding of giftedness as it played out in these learners' lives and contexts. These cases presented both common features as well as dissimilar features, all of which were relevant and important in giving thickness and richness to the data collection (Stake, 2005).

In conclusion, the design is employed to "signpost the type of interpretation that the researcher envisages", thus indicating the possible outcomes of the study (Henning *et al*., 2004, p. 145). Guba and Lincoln (1981, cited in Merriam, 2009) concur that case studies are the best way to report estimated outcomes. Such a research design offers the researcher thick, grounded, holistic, literal and lifelike descriptions of the phenomenon. It also highlights meanings and "can communicate tacit knowledge" (Merriam, 2009, p. 49). Additionally, it can render insights into "how things get to be the way they are" (Merriam, 2009, p. 44).

3.4 RESEARCH METHODOLOGY

3.4.1 Introduction

Research methodology refers to a process in which a coherent group of methods are fitted together in a complementary manner to deliver findings which answer the research questions (Henning *et al*., 2004). The main research question here, What are the participating Grade 11 learners' experiences of being academically gifted?, guided the study, imposing specific methodological requirements to elicit the required data (Henning *et al*., 2004). A qualitative research methodology was used to answer both the main research question and the sub-questions, and to collect, analyse and interpret the data.

3.4.2 Qualitative research

My research into the lived experiences of academically gifted Grade 11 learners had to be scientifically plausible and justifiable. Merriam (2009) proposes that a qualitative methodology can be used to investigate how people construct their worlds and interpret their lived experiences, as well as give meaning to them. The primary goal of this approach is to describe and understand human experiences in a social context, rather than explain them (Babbie & Mouton, 2010). Its secondary aim is to "uncover and interpret" the meanings the participants construct and the sense they make of the phenomenon experienced in their lives (Merriam, 2009, p. 24). I therefore used a qualitative research method to give a comprehensive, in-depth description and understanding of giftedness, as experienced by academically gifted Grade 11 learners (Babbie & Mouton, 2010).

Qualitative research is defined as a "broad methodological approach to study social action" (Babbie & Mouton, 2010, p. 270). It is an umbrella term which refers to a collection of methods and a range of interpretive techniques used to make sense of a phenomenon in the social world (Merriam, 2009; Babbie &

Mouton, 2010). In this study, a basic qualitative strategy was applied (Merriam, 2009). This complied with the following key features of qualitative research.

Qualitative research entails a process of investigation (Patton, 2002) in which the researcher, as primary instrument, is positioned to take an interpretive, naturalistic approach, conducting research in the natural setting of the participants, in this study the two chosen schools (Denzin & Lincoln, 2005; Merriam, 2009; Babbie & Mouton, 2010). The researcher focuses on the process, rather than the outcome (Babbie & Mouton, 2010). Thus the world of experience of the participants is made visible through the researcher taking an 'insider' stance, while remaining unbiased (Denzin & Lincoln, 2005; Babbie & Mouton, 2010). In this study, therefore, I deliberately attempted to put myself in the shoes of the Grade 11 learners in order to understand the lived experience of being academically gifted.

To gain an in-depth understanding of the participants' experiences, I set out to get as close as possible to them in their natural settings (Babbie & Mouton, 2010). Getting close to participants' life-worlds ensures that their experiences are described and understood through their own eyes (Babbie & Mouton, 2010). Furthermore, the data generated will "represent the participants in their own terms" (Patton, 2002, p. 28). This is done through transcribing textual data according to the exact phrases used by the subjects (Babbie & Mouton, 2010).

In order to interpret the data obtained, the researcher empathically relives the transcribed textual data, gaining a contextual understanding of the participants' lived experiences, in this case of being academically gifted (Terre Blanche *et al.*, 2006). Through an inductive process, new understandings are derived and novel insights gained into the phenomenon under study (Babbie & Mouton, 2010). Central to a qualitative research methodology therefore was the understanding of giftedness as a human phenomenon which occurs in a natural context, such as in the school or family. Further, a rich and "thick description" (Babbie & Mouton, 2010, p. 272) of the lived experiences of the six gifted Grade 11 learners was necessary (Terre Blanche *et al.*, 2006).

3.5 THE RESEARCH SETTING

For the purpose of this study, it was essential that I had a clear picture of the contextual setting in which the participants were located. The meanings the Grade 11 learners gave to their lived experiences could only be understood in relation to the context in which these experiences occurred (Terre Blanche *et al.*, 2006).

The study was conducted in two high schools in different socio-economic communities in a town in a rural area of the Western Cape Province. They were situated within one Educational Management and Development Centre (EMDC). As a result of the former Apartheid government, the town is still demarcated into two separate socio-economic contexts, an affluent area and a disadvantaged socio-economic community. Both these communities have public library facilities. The medium of instruction in both schools is Afrikaans.

The school in the affluent area comprised a learner population of 513 predominantly Afrikaans-speaking learners. It had sixteen permanent and eleven temporary qualified teachers. The Grade 11 learner population

in the non-compulsory FET band numbered 103. The school did not have a school library, but did have a fully equipped media-resource centre, as well as computer facilities.

The school in the low socio-economic area had a multi-cultural population of approximately 1690 learners, mostly from coloured or other ethnic cultural backgrounds. Their home languages ranged from Afrikaans, English, and isiXhosa, to Sesotho and Zulu. The school had forty-seven permanent and five temporary qualified teachers. The Grade 11 learner population in the non-compulsory FET band numbered 257. The school did not have additional resources, such as a school library or access to a media-resource centre. However, it did have computer facilities.

3.6 SELECTION OF PARTICIPANTS

According to Henning *et al*. (2004) and Merriam (2009), purposive sampling is an appropriate method in qualitative research. Through this, suitable participants are selected for a study on the basis of predetermined criteria (Roulston, 2010). In this research, I relied greatly on my own knowledge of the topic and the phenomenon under study to set the criteria for selection (Patton, 2002; De Vos *et al*., 2005). The individual cases were carefully selected in line both with the aim of the research and with the role the participants would have in the investigation (Cohen, Manion & Morrison, 2000; Patton, 2002; Merriam, 2009).

According to Patton (2002, p. 40), the selection of individual case studies in research aims at gaining an in-depth understanding and insight about the phenomenon under study, rather than "empirical generalization from a sample to a population". These selected participants therefore did "not pretend to represent the wider population" (Cohen *et al*., 2000, p. 104). By selecting information-rich cases for study in depth (Merriam, 2009) a great deal is learned about issues which are of central importance to the purpose of the research and the phenomenon under investigation (Patton, 2002).

The sample size depends on what the researcher wants to know, the purpose of the study and how reliable it will need to be, as well as on the available time and resources (Patton, 2002; Merriam, 2009). A small sample can be very useful and valuable to a study, specifically in cases where the information is rich. In the interpretive-constructivist paradigm, the focus is on gaining in-depth knowledge, not necessarily breadth or a great quantity of knowledge. Qualitative researchers are therefore apt to use a small number of people, seeking depth of information within a specific context (Patton, 2002; Kelly, 2006). The validity and significance, as well as the insights generated from qualitative inquiry, derive from the richness of the information of the selected cases, as well as the researcher's ability effectively to observe and analyse. Sample size therefore does not necessarily determine the validity of the inquiry.

I selected the subjects for this study through a purposive process of sampling. The small subset of participants of the larger population (Babbie & Mouton, 2010), namely case samples (units of analysis), were chosen as they "illustrated features of interest" for the study (De Vos, Strydom, Fouché & Delport, 2005, p. 328). The two high schools were purposely selected according to specific criteria. Both were secondary schools in one EMDC and in contrasting socio-economic contexts in a rural town in the Western Cape Province. The high schools were selected from two diverse communities in the town to obtain a diverse

sample of participants. After the two schools had been selected, I approached them to ask for their voluntary participation in the research study. Informed consent was obtained from the two principals. They also identified the teachers who could assist me in choosing six individual case study participants.

I critically reflected on possible selection criteria for identifying academic giftedness, as suggested by the relevant literature on the subject (De Vos *et al*., 2005; Merriam, 2009; Roulston, 2010). Clear criteria were needed, given the complexity of identifying gifted individuals. For example, I could not rely on psychometric measures, since these were seen as invalid in the South African multi-cultural context (Taylor & Kokot, 2000; Mönks & Mason, 2000; Sutherland, 2006).

The Grade 11 head teachers of both schools were individually approached in their respective school settings after ethical clearance was obtained from both the research ethical committee of the university (REC) (see Appendix A) and the Research Department of the Western Cape Education Department (WCED) (see Appendix B). Informed written consent was also obtained from both the principles before the respective teachers were approached to assist me in selecting the participants (see Appendices C and D). I relied on their knowledge of the learners and therefore informed them about the aims of the study and discussed the selection criteria and procedure with them in detail. The two Grade 11 head teachers each identified an additional six other teachers in their respective schools to assist me in the identification process. I met with these two groups of teachers of the two schools. They were also told about the aims of the study, and the selection criteria and procedures were discussed with them. They were asked to manage their contributions to the study with sensitivity and confidentiality, so as to ensure the privacy and anonymity of the participating learners. With my collaboration, the teachers in each school identified three Grade 11 participants who were considered to be academically gifted from both genders who also met the selection criteria. Adapted from Sousa (2009, p. 245), as shown in Chapter one, Table 1.1, Section 1.6.3, the criteria were made available to help the teachers in the identification process. Trost (2000, p. 318) found that teacher ratings "turned out to be fairly good predictors of later achievement in school," noting that "combined teacher rating of students' cognitive and creative abilities proved better than the combined results of a battery of ability and creativity tests" (see Chapter 1, Section 1.6.3).

The six teachers from each school individually identified academically gifted learners. Their decisions were based on their judgement of the learners' progress in school. They provided the head teacher of Grade 11 with a list of names and their reasons for selecting these particular learners. At both schools, while being unaware of the others' choice, the teachers separately selected exactly the same learners. In the affluent school, two males and one female were identified. In the less affluent school, the teachers selected one male and two females. In the latter school one of the female learners and the male learner spoke Afrikaans at home, while the other female learner's home language was Sesotho, though she also spoke four other languages. The two Grade 11 head teachers gave me the names of the learners and their parents' contact details. They then directly approached the three participants for voluntary participation in the study. The purpose and aims of the study were explained to them, and confidentiality and the need to ensure the privacy and anonymity were emphasized. I then scheduled meetings with each of the learners and their mothers at

their homes. Written informed consent and assent were obtained from both the participants (refer to Appendix F) and their parents (refer to Appendix E).

3.7 DATA COLLECTION METHODS

In qualitative research, data is the "ordinary bits and pieces of information" which originate from the environment (Merriam, 2009, p. 85). This information is employed by the researcher in the investigation. In this study, semi-structured interviews and focus group interviews were carried out in the participants' natural settings. The subjects were also asked to create collages which could be used as data (Henning *et al*., 2004).

3.7.1 Interviews

An interview is a natural conversational activity which may entail different kinds of talk (Roulston, 2010). It is a valuable way of obtaining information from another person (in research, an interviewee) (Merriam, 2009; Roulston, 2010; Henning *et al*., 2004). As Kvale and Brinkman (2009, p. 2, cited in Marshall & Rossman, 2011, p. 145) point out, "an interview is literally an *inter view*, an inter change of views between two persons."

It is the most frequently used method of collecting data in qualitative research. The interviewer engages the interviewee in a focused conversation, while putting questions related to the research topic (Merriam, 2009). Wissing (2012, p. 87) describes it as a "planned social interaction", comprising a succession of questions followed by answers. The content may vary from the expression of deep emotions to sharing narratives, drawing on the lived experiences as shared by individuals or groups (Merriam, 2009; Henning *et al*., 2004). Its main purpose is to obtain specific information focused on the theme of the research. In particular, it sets out to determine how and what someone else thinks about the phenomenon under investigation, as what they think and know are significant and should be made known (Patton, 2002; Merriam, 2009). Through interviews, one may collect data which may not be directly observed. In this manner, the researcher may enter a participant's reality, viewing it through her or his eyes (insiders' view) (Patton, 2002; Merriam, 2009; Henning *et al*., 2004). The researcher thus develops an understanding of the subjective experience of the subject (Kelly, 2006). Various types of interviews are possible, categorized according to their degree of inherent structure, for example, highly structured standardized interviews, semi-structured, or unstructured. For this study, I chose a semi-structured interview format.

3.7.1.1 Semi-structured individual interview

Along with other methods of data collection, the participants in this study were interviewed by means of individual semi-structured interviews. These interviews were carried out to gain insight into the meaning the Grade 11 learners gave to their lived experiences as gifted adolescents and how these experiences played out in their various contexts. This type of interviewing is most frequently used in qualitative research (Babbie & Mouton, 2010; Marshall & Rossman, 2011). It was chosen because, as Merriam (2009) suggests, it is the best technique for case studies of a few selected individuals, as in this study.

A semi-structured interview entails less structured and more open-ended questions, but does allow for more or less the same questions to be asked of all the participants (Patton, 2002; Wissing, 2012). The researcher creates a plan for the inquiry, which establishes a general direction for the conversation on topics arising (Merriam, 2009; Marshall & Rossmann, 2011). Such an interview guide is usually compiled for a semi-structured interview (see Appendix G). Several open-ended questions are formulated around the research topic. The open-ended nature of the interview allows for more flexibility, within the overall schedule (Patton, 2002; Merriam, 2009). Although each individual interview may start at the same point, the participant's responses may vary, so the interviews may be more flexible and may differ from each other (Roulston, 2010). Thus open-ended questions allow the researcher the freedom to probe the subjects' responses, as well as to pursue emerging topics. Such probing may enable the researcher to respond to the situation at hand, looking for further detail and clarification (Roulston, 2010). Babbie and Mouton (2010, p. 289) maintain that a semi-structured interview is malleable, iterative and unremitting, rather than "locked in stone". The questioning may therefore be redesigned according to the situation or the participant's response. This flexible structure calls for advanced listening skills on the part of the researcher, who must decide when and how to probe, as well as decide if all research topics have been appropriately covered (Roulston, 2010). Finally, the interview may in turn yield "verbatim accounts" of everything that might take place during the interview sessions and thus enhance credibility (Wissing, 2012, p. 91).

I scheduled interview sessions at the participants' schools on dates and times which were suitable to each individual. I also located an appropriate private facility to ensure that the participants' privacy was not compromised. Issues of confidentiality and anonymity were discussed and permission to tape-record the interviews was once again obtained. Besides the six semi-structured individual interviews, a focus group interview was also arranged. This generated rich data and allowed for the triangulation of the findings from the different methods.

3.7.1.2 Focus group interview

The focus group interview was used as additional means to generate data. The term 'focus group' describes an interview conducted with a group who share similar experiences and backgrounds (Kelly, 2006; Merriam, 2009). It is carried out in a supportive environment where the researcher as a facilitator asks focused questions on a specific topic in line with the research focus, to a group of approximately six to ten participants (Patton, 2002; Merriam, 2009; Marshall & Rossman, 2011). These should preferably be strangers to each other, but should have knowledge of the topic (Patton, 2002; Merriam, 2009). Focus group interviews offer advantages, but also have disadvantages which need to be considered by the researcher (Patton, 2002; Babbie & Mouton, 2010; Marshall & Rossman, 2011).

The advantages of a focus group interview include the following. It is underpinned by a constructivist perspective, as the participants interact and engage with one another's responses, generating additional comments as they are influenced by each other's responses. Through the questioning, as guided by the interview schedule, an exchange of different viewpoints is encouraged (Marshall & Rossman, 2011). The participants do not necessarily have to agree or disagree with one another's responses, not do they seek either

to make decisions or solve problems (Patton, 2002; Merriam, 2009). They shape and re-shape one another's opinions, while the researcher accesses information which might not otherwise be available (Babbie & Mouton, 2010). From this, rich data may be generated (Roulston, 2010), as the researcher gains insight into the inter-subjective experiences of the participants as a group of people (Kelly, 2006). Focus group interviews yield quick results in a short period of time and are therefore time- and cost-effective (Patton, 2002; Babbie & Mouton, 2010; Marshall & Rossman, 2011).

However, the researcher should also be aware of the disadvantages of focus interviews. The number of questions which can be asked is restricted and the time available for each response needs to be managed. This requires a particular skill. The researcher should be aware of the power dynamics of the group and should therefore take care to manage those participants who might dominate the discussion and allow opportunities for the less verbal ones (Patton, 2002; Marshall & Rossmann, 2011). The discussion should also be firmly guided to ensure that it stays on the topic under investigation (Patton, 2002).

I carried out the focus group interview after the data had been gathered from the collages (see next section) and the individual interviews had been analysed. Specific guiding questions were formulated to elicit more relevant data, as well as to address the gaps in the data already collected (see Appendix H). The focus group interview included all six of the participants. During the session, I set out to create a supportive and relaxed environment of trust, encouraging the learners to freely discuss and share their personal opinions and lived experiences around the question under investigation. Mutual respect, confidentiality and anonymity were again highlighted. I empathically guided the discussion while summarizing what was being shared. Opportunities were given to clarify misinterpretations, and less verbal participants were encouraged to take part equally in the discussion.

3.7.2 Collages

During the initial meetings with the learners and their parents, once agreement and consent had been obtained, I asked each participant to compile a collage that displayed his or her life-story. This might contain the individual's interests and 'dislikes', important events during his or her life, as well as reflecting anything distinct or unique about the person. During the individual interviews, I used the collages to establish quick rapport with the participants and to put them at ease. I asked each participant: "Tell me about your collage: what does it say about you"? This encouraged the subjects to talk freely about themselves, and allowed me to engage with them at a deeper level before posing the more formal questions.

Collage as a creative visual strategy can be used to collect meaningful data. It is a visual form of story-telling which is used to elicit and gather baseline information (Butler-Kisber & Poldma, 2010). Usually no rules or boundaries are set (Fritz & Beekman, 2007; Watson & McMahon, 2010), and the subjects are free to select the material, experiences or content they want to relate in their individual and unique stories (Fritz & Beekman, 2007). They have the freedom to design their own pictorial compilation, using any kind of pictures, materials, written words or slogans to introduce 'the self', or to say, "This is me" (Fritz & Beekman, 2007, p. 166). (See Appendix K, Participant A and E as examples).

This strategy helps to establish rapport more readily and facilitates a more relaxed space for a conversation. It can promote effective communication and create a relationship, as well as enhancing a greater understanding of the experiences of individual participants (Watson & McMahon, 2010). According to Lamprecht (2002), it helps the researcher to gain valuable insights into the interests and life-worlds of the subjects. A space is created in which the participant can reflect, taking time to debrief about the relevance of the topic for him or her (Watson & McMahon, 2010). In making the collage, the participant not only creates a self-portrait but becomes an active agent in giving meaning to his or her own life-story (Fritz & Beekman, 2007; Mitchell, 2008). It is thus an interpretive process which facilitates growth and self-awareness about the individual's own lived experiences (Fritz & Beekman, 2007; Mitchell, 2008). It enables the participant to "explore and express goals and qualities" within him- or herself (Watson & McMahon, 2010, p. 103).

3.8 DATA ANALYSIS

Data analysis entails a dynamic process of interpreting and making sense of the data gathered (Merriam, 2009; Babbie & Mouton, 2010). In a case study, such analysis seeks first and foremost to convey an intensive holistic understanding of the case. It communicates an in-depth understanding of the case as a single, bounded unit of analysis (Merriam, 1998).

The process of data analysis in this multiple case study comprised two stages. In stage one, a within-case analysis was conducted, while stage two involved cross-case analysis (Patton, 2002; Merriam, 2009). Data collected from the six cases was analysed separately during stage one, while in stage two a process of cross-case analysis was used to build a "general explanation that fits each of the individual cases" (Merriam, 1998, p. 195). All recorded data, where applicable, was transcribed verbatim so that it would be available in text format. The raw material was mainly in Afrikaans, as the interviews were conducted in Afrikaans, the preferred language of the participants. The quotes used in the presentation of the data were translated into English, keeping as near as possible to the original Afrikaans text.

As noted in Chapter one, a qualitative content strategy was used to analyse data collected in this study (Henning *et al*., 2004). Qualitative content analysis is a "highly creative and intellectual process" (Rule & John, 2011, p. 75). It comprises a basic process in which raw data is "worked" in a systematic way (Henning, *et al.*, 2011, p. 104) to make sense from and give meaning to the data (Merriam, 2009; Rule & John, 2011). In this process, both what participants say and what is observed are consolidated, reduced and interpreted (Merriam, 2009). The raw data is 'broken up' into chunks, coded and categorized, and emerging themes are identified. Consequently, inferences are drawn from large volumes of data (Henning, *et al.*, 2011), which entails a "recursive and dynamic" process (Merriam, 2009, p. 169).

In qualitative research, analysis begins as the data is being collected and continues throughout the process of data generation (Merriam, 1998; Patton, 2002). The interpretive-constructivist researcher enters the research process with no clear hypothesis but with intuitively derived assumptions about the research question (Durrheim, 2006). The theoretical framework informs the study and can also lend structure to focus the researcher's inquiry and the interpretation of data (Merriam, 2009); data analysis, however, remains

inductive, working "from the particular to the general" (Merriam, 2009, p. 16). The researcher remains close to the data and tries to make sense of the phenomenon under study, deriving new understandings and novel insights (Babbie & Mouton, 2010).

The aim of the present study was not to develop theory, but rather to gain an in-depth understanding of how giftedness was experienced by the subjects, and to draw important conclusions which might in turn lead to valuable recommendations. During stage one, the entire text of each individual case was read to gain a global impression of the content. Subsequently the text was re-read in order to highlight the different central themes within the data which were based on concepts in the theoretical framework, as well as being significant to the focus of the study (Rule & John, 2011). Through a process of open coding, those themes relating to the theoretical framework and focus of the study were identified in each individual case and marked in colour and indicated in table format on the original transcription (Henning *et al.*, 2004). These were indicated in a column next to the transcribed texts (see Appendix I) (Merriam, 2009). Each individual case was then presented as a portrait (Merriam, 1998). These portraits took on a descriptive narrative format (Rule & John, 2011), in which each participant's experience of being gifted was presented according to the central themes identified, as outlined above.

Once the within-case analysis was completed, I moved on to the second stage, the first phase of which, cross-case analysis, was used to "build abstractions across cases" (Merriam, 2009, p. 204). Unified patterns which cut across the various single cases and which might further lead to the identification of categories and themes as well as differences across these cases were identified and noted (Merriam, 1998; Patton, 2002). The data chunks were compared across the various cases and similarities and differences were recorded. This was done by putting specific questions to reflect the precise meaning of the data. These different patterns and similarities were grouped, coded and labelled, then placed in categories and marked in an open space with an arrow pointing to the text (Henning *et al.*, 2004) (see Appendices I and J). The categories were further refined in the final phase of stage two. Both the identified themes and categories were refined until only a few central themes across the cases remained. In this process, "data is broken down, conceptualized and put back together in new ways" (Henning *et al.*, 2004, p. 131). The main categories, together with possible sub-categories, were tabulated, presented and discussed. According to Henning *et al.* (2004), this process of refinement enables the researcher to obtain a holistic perspective, and an insight into and understanding of the data. The process further aided the formulation of particular recommendations, which are presented in Chapter five (Merriam, 2009, p. 204).

Data analysis is a process of describing and interpreting, as well as moving between inductive and deductive reasoning strategies. In this study these analytic reasoning strategies were implemented by inductively deriving themes and categories from the raw data as generated by the various data collection methods and then the structure presented by the bio-ecological model was used in the further analysis of data and the presentation of the findings (Merriam, 2009). This yielded meaning and understanding to the eventual findings (Merriam, 2009). The deductive facet of the abductive process as suggested by CHAT was now

invoked in using the mediational structure of an activity system created by Engeström to lend structure to the ethnographic narrative.

3.9 DATA VERIFICATION

Researchers need to present valid and reliable data in an ethical manner (Merriam, 2009). To ensure the authenticity and reliability of the data collection, analysis, interpretation and verification strategies need to be carried out (De Vos *et al.*, 2005). Data verification is a rigorous process of systematically checking and confirming the validity and reliability of the data collected. According to Merriam (2009), various strategies can be used to improve the validity and reliability of qualitative studies. In the present study, validity and reliability were ensured by using the model suggested by two American qualitative researchers, Egon Guba and Yvonne Lincoln (Merriam, 2009; Babbie & Mouton, 2010). Guba and Lincoln (1985, cited in Babbie & Mouton, 2010, p. 276) maintain that the credibility of a good qualitative research study rests on the "neutrality of its findings or decisions". Their model aims to ensure validity and reliability by means of four central principles: trustworthiness (credibility), generalizability (transferability), reliability (dependability), and confirmability.

3.9.1 Trustworthiness or credibility

Trustworthiness or credibility can be equated with the internal validity of a study (as in the case of quantitative research). It answers the question of whether the data collected has generated credible findings (Merriam, 2009). It highlights the congruence between research findings and reality. The credibility of a study increases when there is conformity between the meaning the participants ascribe to a phenomenon, its objective reality, and the way the researcher presents their different perspectives. According to Merriam (2009, p. 215), various strategies are available to a researcher to increase "the correspondence between research and the real world." Guba and Lincoln (1985) contend that triangulation, member checking and peer examination are strategies which can strengthen a study's credibility. These strategies were used in this study to increase credibility and are discussed below.

3.9.1.1 Triangulation

In triangulation, several methods are used to study a single phenomenon and to cross-check findings. This process of combining methods enhances and strengthens trustworthiness in qualitative research and reduces the possibility of investigator bias (Patton, 2002; Babbie & Mouton, 2010). Triangulation is the best means to elicit the "various and divergent constructions of reality" from different angles, sources and viewpoints (Babbie & Mouton, 2010, p. 277). It can be applied both within single cases and across cases (Kelly, 2006).

In this study, I used multiple data collection methods, such as individual semi-structured interviews, a focus-group interview and collages. The data gathered from each individual interview was cross-checked and compared with data elicited from the individual collages, as well as from the focus-group interview. Individual perspectives and experiences were cross-checked for similarities and emerging themes, as well as

for variations or alternative, contrasting responses. This cross-checking of the data to verify findings gave further credibility to the study.

3.9.1.2 Member checking

Member checking, also called "respondent validation" (Merriam, 2009, p. 217), involves soliciting feedback from participants on the emerging findings. According to Merriam (2009) and Babbie and Mouton (2010), it is the most important way of ruling out misinterpretation of the meanings participants attach to their experiences, perspectives and activities. Furthermore, it can identify and highlight any researcher bias or misunderstanding of what has been observed. In this study, the focus group interview was used to verify the data through member checking. The data acquired from the six individual interviews and the collages was "checked" with the participants, using newly formulated questions and discussions of these in the focus group interview, to ensure that my interpretation "rang true" (Merriam, 2009, p. 217).

3.9.1.3 Peer examination

Peer examination was also carried out in this study to ensure and increase credibility. According to Merriam (2009), the examination of raw data and findings by a fellow student is a valuable means to increase credibility of a study. In this study, a fellow Master's student "outside the context of the study who has a general understanding of the nature of the study" (Babbie & Mouton, 2010, p. 277) was approached to scan and assess the raw data to determine whether the findings based on the data were plausible. The peer took the role of a "devil's advocate" (Babbie & Mouton, 2010, p. 277), critically questioning my working trail and assisting in the process of interpretation and drawing conclusions.

3.9.2 Reliability or dependability

Traditionally, reliability refers to the dependability of a study. It examines the extent to which the research process in a specific study can be replicated in another study, in the same or a similar context and with similar participants, to yield similar findings (Merriam, 2009; Babbie & Mouton, 2010). According to Guba and Lincoln (cited in Babbie & Mouton, 2010), a study will not be credible if it is not reliable. If it does not prove to be credible or valid, its reliability cannot be established. To determine reliability or consistency in qualitative research, the researcher should rather ask whether the results are consistent with the data collected (Lincoln & Guba, 1985, cited in Merriam, 2009). There should be consistency between the research results and the data collected, despite the different interpretations which could be made of the same data set. Strategies such as triangulation and peer review ensure that the reliability of a study overlaps with the results of those implemented to ensure its trustworthiness or credibility. An authentic account of the research process, known as an audit trail, is a further strategy to check a study's reliability and consistency (Merriam, 2009; Babbie & Mouton, 2010).

3.9.2.1 Audit trail

An audit trail was additionally used in this study to ensure its dependability. It gave an account of decisions and descriptions of the research process, with a particular focus on data collection and analysis (Merriam, 2009). I gave a "running record" of my interactions as I engaged with the data in analysing and interpreting it

(Merriam, 2009, p. 223). According to Lincoln and Guba (1985, cited in Merriam, 2009, pp. 222-223), the researcher substantiates the claims made by the research by ensuring that independent readers can "authenticate the findings of the study" by following the researcher's track or "log".

A detailed account of how the present study was conducted and how the data was analysed is found in Sections 3.7 (research methodology) and 3.8 (data analysis). Chapters three and four act as the audit trail for this study, with the research process and data analysis described in detail. The data are presented in tabular and quotation format, while the attached appendices give an account of the process implemented.

3.9.3 Confirmability of the research process and findings

The confirmability of the research process and findings measures the extent to which the findings are the product of an objective investigation and not of the researcher's own prejudices or misconceptions (Babbie & Mouton, 2010). According Lincoln and Guba (cited in Babbie & Mouton, 2010), the reader should be left to trace the research process through an verifiable audit trail, from collecting the raw data through to analysing and interpreting it, to tracing the recommendations back to the sources that supported the investigation.

During the present research, I allowed the participants' own voices to be heard. I presented rich, thick descriptions to contextualize the study and allowed for an "inquiry audit" to be followed (Babbie & Mouton, 2010, p. 278). A detailed account of the findings is presented and discussed in the following chapters.

3.9.4 Generalizability or transferability

The transferability of a study is a measure of its external validity. It generally indicates the extent to which the findings of one study can be applied to another study, contexts or participants (Merriam, 2009; Babbie & Mouton, 2010). For a study to be generalizable, its findings have to be internally valid, credible and reliable (Lincoln & Guba, 1981, cited in Merriam, 2009). The qualitative researcher is not interested in generalizing statistical findings, but rather relies on thick descriptions to contextualize the study. These in-depth descriptions allow the reader to determine the extent to which the findings may match other situations and contexts and therefore be transferable (Merriam, 2009; Babbie & Mouton, 2010). Depending on the detail and precision of the data reported, the reader will be able to distinguish "similarities between the sending and receiving contexts", thus forming an independent judgement about the transferability of the research findings (Babbie & Mouton, 2010).

A further strategy for transferability, suggested by Guba and Lincoln (cited in Babbie & Mouton, 2010), entails the maximizing of variation through purposive sampling (Merriam, 2009). According to Merriam (2009, p. 229), purposely seeking variation or diversity in sample selection may "allow for a greater range of application of the findings by consumers of the research." In this study, the diversity of the small sample size was increased by including participants from different contexts and cultures. Such diversity in the purposive sampling of subjects may increase the transferability or generalizability of the study. A detailed description of the participants is given in Section 3.6.

The above strategies were implemented to enhance the rigour and trustworthiness of this qualitative research study.

3.10 ETHICAL CONSIDERATIONS

As briefly introduced in Chapter 1, Section 1.7, the four guiding ethical principles, as stressed in Wassenaar (2006), were employed through all the stages of the research process. These principles are autonomy and respect for the dignity of persons, non-maleficence, beneficence, and justice. Wassenaar (2006) adapted a framework for social science research originally developed by Emanuel, Wendler, Killen and Grady (2004) for ethical research in developing countries. The framework is embedded in these four guiding ethical principles. It is further based on eight practical principles, with a number of operational benchmarks. For this study, the four guiding ethical principles and six of the practical principles were applied. The practical principles were scientific validity, fair selection of participants, favourable risk/benefit ratio, independent ethical review, informed consent, and on-going respect for participants and study communities (Wassenaar, 2006).

Autonomy and respect for the dignity of persons includes informed written consent, confidentiality and right to privacy, the voluntary nature of the study, non-maleficence and beneficence. The principles of justice include fair selection of participants, favourable risk/benefit ratio, scientific validity, independent ethical review and on-going respect for participants and study communities. My own training was in the field of educational psychology, so research ethics and ethical considerations in this study will be discussed in this context. The aspects of ethical principles as presented by Alfred Allan (2008) and Wassenaar (2006) will also be included in the discussion.

If considered and applied together with care, these principles can enhance the ethical standing and scientific value of a study. This framework offers the researcher a "coherent set of considerations and benchmarks", against which the ethical merits of a particular study may be evaluated (Wassenaar, 2006, p. 69).

3.10.1 Autonomy and respect for the dignity of persons

This principle denotes the right and competency of the participants to "freely and voluntarily" (Allan, 2008, p. 128) make decisions with regard to their lives. It refers to the participant's position of autonomy and competence in giving informed consent to taking part in a research study. This principle is also linked to the protection of the privacy of the participants and institutions and to ensuring confidentiality at all times.

3.10.2 Informed written consent

Written informed consent and assent are needed to ensure the cooperation of participants and to clarify any concerns, so I actively engaged in obtaining valid permission. According to Wassenaar's framework (2006, p. 72), the benchmark standards for obtaining informed consent comprise four components: a) provision of appropriate information; b) participants' competence and understanding; c) voluntary participation and freedom to decline or withdraw after the study has started; and d) formalization of the consent, usually in writing. I therefore initiated the research process by gaining written permission from the Research Department of the Western Cape Education Department (WCED) to work with learners from the two chosen schools (see Appendix B). Ethical clearance was obtained from the research ethical committee of the university (REC) (see Appendix A). Informed written consent was secured from the principal of each school

(see Appendices C and D), as well as from the parents of the learners (see Appendix E). The participants also gave their assent (see Appendix F). Keeping within the ethical code of the Health Professions Council of South Africa (HPCSA), I informed the participants and all those individuals and institutions relevant to the study about the aims, purpose and details of my research.

3.10.3 Confidentiality and right to privacy

I ensured that the limits and nature of confidentiality were discussed with the participants and their parents. Privacy was highlighted and assured, and pseudonyms were used to protect the identity of the subjects, their parents, and the schools. Each participant chose his or her own pseudonym (see Chapter four for examples). I also explained the nature of the research and the role I would play as the researcher, and that I would personally respect the privacy and dignity of all relevant role-players (Allan, 2008; RSA, 2006).

3.10.4 Voluntary nature of the study

I clearly explained that all participation in the study was voluntary and that the learners were not forced to take part in any of the processes if they chose not to. They were informed that they could decline to participate or could withdraw from the study at any stage of the research process with no negative consequences for themselves. Respect for their autonomy and for their dignity was continuously adhered to (RSA, 2006; Wassenaar, 2006; Allan, 2008).

3.10.5 Non-maleficence

The principle of non-maleficence complements the principle of autonomy. It obliges the researcher to ensure that no harm or wrong-doing shall befall, either as a direct or indirect consequence of the research. I therefore undertook to cause the participants no harm or wrong, to avoid any kind of deception, to show respect, and to honour differences (Wassenaar, 2006; Allan, 2008).

3.10.6 Beneficence

This refers to the moral obligation of the researcher to act for the benefit of the research subjects and to promote their welfare (Allan, 2008). I did everything in my power to not violate the rights of the participants, and to ensure that their welfare was respected and honoured. I also assured those concerned that the research would benefit not only them but the broader community as well. Thus the benefit of the participants at all times remained central to the decisions I made (Wassenaar, 2006; Allan, 2008).

3.10.7 Justice

The principle of justice in research is a complex one, founded on "fairness, rightness and equity" (Allan, 2008, p. 126). In general, it requires the researcher to treat participants with fairness and equity during all stages of research. I therefore ensured that no unfair discrimination or favouritism took place during the research (Allan, 2008). This principle also applied to the fair selection of participants, as well as obliging me to give care and support to those who might become distressed or harmed by the study.

3.10.8 Fair selection of participants

Fair selection entails selecting subjects from a population to whom the research question applies. For this study, the subjects (academically gifted Grade 11 learners) were chosen on the basis of a set of predetermined criteria, as discussed in Section 3.6. The selection was made independently, without my personal involvement, to ensure fair and equitable practice.

3.10.9 Favourable risk/benefit ratio

Wassenaar (2006, p. 71) asserts that it is the researcher's responsibility to "carefully identify all the possible risks, harms, and 'costs' of the research to the participants, and specify means to minimize such risks and costs so that the risk/benefit ratio is favourable." Although this was a medium risk study and held no obvious direct risks for the participants, I developed contingency measures, asking a qualified, registered professional (educational psychologist) to assist and support any participants who might become distressed at any stage of the research. In this way, I ensured the protection of both the research participants and the school.

3.10.10 Scientific validity

"Poor science is unethical … " (Wassenaar, 2006, p. 70). For Wassenaar, the research design, methodology and data analysis applied in a study should be coherent, rigorous, justifiable and feasible. They should lead to valid answers to the research questions. The methodology should be appropriate and systematic. In this chapter, I described and defended my research design (collective instrumental case study type), methodology (qualitative research) and methods of data analysis (within-case and cross-case analysis) in order to submit it to the scrutiny of the research community. Chapter four highlights my research findings in such a way that the 'audit trail' (see Section 3.9.2.1) can be followed (Merriam, 1998) and the scientific value of the study be determined.

3.10.11 Independent ethical review

The proposal for this study was submitted to an independent and competent research ethics committee of the university. This was done to allow the scientific elements and the appropriateness of the methods used to be reviewed by the committee. It also determined whether the study and methods carried any risks of harm or likelihood of benefits. The ethics review further ensured the maximum protection of the participants, in order to further enhance the quality of the research (Wassenaar, 2006). (See Appendix A).

3.10.12 On-going respect for participants and study communities

The principle of on-going respect for participants and study communities involves the researcher at all times treating the participants with respect, as well as ensuring that their information remains confidential and that their communities cannot be identified from the research report. Pseudonyms were used for the subjects in this study and the schools were referred to according to their SES contexts as indicated in the report.

In conclusion, an ethical stance, sensitivity and integrity on the part of the researcher are imperative and should be adhered to at all times throughout a research study. I continuously adhered to the professional code

of ethics and endeavoured to present all information accurately and without bias or prejudice. My conduct was guided by the principle of respect and the need to display high morals and ethical conduct.

3.11 CONCLUSION

This chapter discussed the interpretive-constructivist paradigm and gave a detailed description of the research design. The research methodology with reference to qualitative research was outlined. Accounts of the delimitation of the research setting, as well as the procedure for selecting the participants, were given. The choice of semi-structured interviews, focus group interviews and collages as data collection methods was recorded. The process of data-analysis was discussed, and consideration was given to data verification and ethics. The next chapter outlines and explains the research findings, as they were derived from the participants' answers and discussions. The various emerging themes and categories are identified and discussed as they contribute to answering the research questions.

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 INTRODUCTORY DISCUSSION

This chapter will present the research data collected from the six participants, each of whom represents a unit of analysis or single case study. The data will be analysed in order to answer the overarching research question and the sub-questions posed in Chapter one. The following research question and sub-questions guided the study:

What are the participating Grade 11 learners' experiences of being academically gifted?

The following sub-questions were also investigated:

- What contributes to their success, focusing on the various systems and proximal processes within their contexts?
- What are the specific kinds of support needed for these gifted learners to optimize their potential?
- Are these needs sufficiently provided for in the current inclusive education system in South Africa?

Currently, the Department of Basic Education in South Africa follows the principle of inclusivity, whereby all learners with diverse abilities and needs have the right to be included in mainstream classrooms and receive quality education (De Villiers, 2009). According to the Constitution, every individual has the right to be respected and treated with equality and equity, and also the right to both basic and further education (RSA, 1996). The South African Schools Act No. 84 of 1996 stipulates that "education of progressively high quality for all learners" should to be provided, while "a strong foundation for the development of all our people's talents and capabilities" which could "advance the democratic transformation of society" is to be laid down (Department of Education, 1996, p. 1). The "rights of all learners" are to be upheld (Department of Education, 1996, p. 1). According to Education White Paper 6, it should be ensured that all learners are enabled to realize their learning potential to the fullest (Department of Education, 2001). The education document *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010) contends that all learning styles and intelligences are to be acknowledged, recognized and provided for, and should not be overlooked in the education system (Department of Education, 2010).

In the light of the above, I was motivated in this study by the question whether gifted learners in mainstream inclusive schools experienced adequate support in the current education system and whether they were sufficiently accommodated, taking their particular abilities and strengths into consideration. From the literature review, it became evident that, although efforts are being made to provide for these learners' needs, the situation seems intricate and rather challenging. Many factors do inhibit quality education for gifted learners.

4.2 EXPOSITION OF WITHIN-CASE DATA

As a first step of data analysis, a within-case analysis of each case was conducted. The six cases will be presented separately, employing the structure provided by Bronfenbrenner's bio-ecological model that served as the theoretical framework for this study. A second phase of data analysis was conducted by employing a process of cross-case analysis during which the cases were compared. The data generated during this phase will be presented in a narrative discussion of the central themes in an effort to answer the research questions. In Table 4.1 the biographical information of the participants is presented. The participants were invited to choose their own pseudonyms and these have been used both in the table and in the presentation of the data.

Table 4.1: An exposition of the biographical information of the participants

Participant	**A:**	**B:**	**C:**	**D:**	**E:**	**F:**
Pseudonym	Timothy	Natasha	Queen	Jan Van Niekerk	Jani De Klerk	Koos
Gender	Male	Female	Female	Male	Female	Male
Age	16 years	17 years	16 years	17 years	16 years	17 years
Culture	Coloured	Coloured	Sotho	White	White	White
Home language	Afrikaans	Afrikaans	Sesotho	Afrikaans	Afrikaans	Afrikaans and English
Language of instruction	Afrikaans	Afrikaans	Afrikaans	Afrikaans	Afrikaans	Afrikaans
Subjects at school	Afrikaans English Mathematics Science Biology Life Orienta-tion Accountancy	Afrikaans English Mathematics Science Biology Life Orienta-tion Accountancy	Afrikaans English Mathematics Science Biology Life Orienta-tion Accountancy	Afrikaans (1st Language) English (1st Language) Mathematics Science Biology Life Orienta-tion Accountancy Additional subjects: Add-Maths	Afrikaans (1st Language) English (1st Language) Mathematics Science Biology Life Orienta-tion Accountancy Additional subjects: Add-Maths	Afrikaans (1st Language) English (1st Language) Mathematics Science Biology Life Orientation Applied Computer Technology Additional subjects: Add-Maths, Xhosa

4.2.1 Case presentations

4.2.1.1 Participant A: Timothy

Timothy lives in a low socio-economic status (SES) community and attends a nearby school in the same community. Both his parents are teachers, one at a local primary school and the other at the same secondary school that he is attending. Both schools are situated in the same low SES community. He is the younger of two children. His sister and niece also live with him and his parents.

Timothy's understanding of his giftedness will open this discussion, followed by a description of his unique personality and inner world, representing the intra-personal level of the Bronfenbrenner model. This will be done by viewing his particular strengths, as well as by presenting the challenges which he faces. On the micro- and meso-levels, the roles and interactions with the various proximal role-players/systems, such as his family, parents, peers and school, will be discussed. As Timothy and his proximal context are embedded in a specific communal context, the role the community plays and its impact on his experience of being gifted will conclude the presentation of his case.

- **Timothy's understanding of own giftedness**

Timothy has an interesting take on giftedness. For him, giftedness often resides in those individuals who might present as underachievers and mask their academic abilities. Often others are unaware of the latent potential in these learners. He further explains that such individuals may be introverted by nature. They may be reserved and tend to isolate themselves from social contacts with their peers. Despite being reserved and in some way loners, they may surprise others with their academic achievements, performing as outliers to the norm. He explains in his own words as follows:

> I would say that it's not always the most intelligent person or the person of whom you expect the most, … the kind of person who excels without others really being aware of it … who is less part of a group or who always stands out above the others.

- **Inner world**

Although Timothy at first appeared shy and reserved, his energy and particular awareness and responsiveness to his environment soon became evident. He presented as a passionate young man with a rich inner-life and has several interests, *inter alia* reading biographies, taking part in various sporting activities, and being involved in community work. From both his collage and the individual interview, it became clear that Timothy actively supports campaigns to raise awareness for the prevention of cancer and for women in their fight against breast cancer. Irrespective of his peers' reactions, he shaved his hair in support of an awareness campaign for those who live with breast cancer. He also writes poems reflecting his experience of life. Furthermore, Timothy is a keen student of history and in particular political history. He is interested in historical political figures such as Nelson Mandela and Martin Luther King, and also in current politicians such as Barack Obama. He studies their political initiatives and follows the daily news faithfully. He deliberately chooses politicians who can act as role-models in their care for human rights, values and social justice, and their positive contributions to mankind.

Timothy cares for people and the environment and appears to be emotionally intelligent. He has the capacity to distinguish issues that need attention from those that could hinder his own development. He has a strong sense of values.

> See to it that the children are not involved with others and that they do not smoke or drink or anything else … but so that we can only be responsible, yes, Miss. … because my conscience troubles me a lot and when it hits me then it bothers me terribly, yes.

He also emphasizes the effect of words, noting that they can either 'build' or destroy people. He loves inspirational quotes. Spirituality, as in ascribing to a particular religion, is an important source of inner strength to him and supports him in his personal maturation, growth and development. He explains that having a spiritual connection to a higher entity motivates him to grow in excellence in all his endeavours and encounters.

It also appears as if Timothy possesses leadership qualities as a particular strength. He is responsible and has the desire to make a difference in his community by caring for others and helping them.

> I will make a difference … I act as a leader.

Timothy is self-confident, valuing his unique identity and qualities as assets needed to attain success. He has a strong sense of self and mentions that he can rely on his personality for success where ability may fail him. He is ruthlessly honest with himself and believes in his own ability and way of doing tasks and assignments.

> My personality will enable me one day to arrive at where I want to be. It's also something on which I build and that I know I can depend on … I have confidence in myself and I believe in what I do and how I do it …

As an independent, innovative young man who likens his life to a tree with many branches, he uses metaphorical language, utilizes abstract cognitive functioning and constantly strives to make unique academic efforts. He enjoys trying out new creative methods in doing tasks. He is very conscientious, has a capacity to surmount challenges and underscores excellence and high standards in all his attempts, whilst being highly inquisitive and explorative. He describes his strong analytical ability and problem-solving skills as particular personal assets.

> … I now use my method and then maybe I want to do it in this way … I just want to try and be myself. Everything I do, I do in the best way that I can and to the best of my abilities. I have a passion for solving things, investigating things, and seeing what really happens … I ask how it happened or why it must be so, almost like a maths problem.

In his academic work he favours working on his own and is very goal-oriented. Timothy plans his learning schedule in advance, sets himself goals and expects of himself to achieve according to his potential. He conscientiously engages in his academic work and works ahead of time towards his goals. He also maintains a positive attitude towards teachers and other authority figures.

> … I like to put up demands for myself in each subject, I almost set up goals for the term … I didn't even worry about the opinions of others, I didn't worry any more, I just did it … the goal was to go to the subject with the right attitude every day …

He has his own unique style of learning. He writes and makes summaries to assist him in memorizing the learning material.

Timothy does, however, also experience challenges in his development. He often feels different from his peers due to his viewpoints and interests, as well as the value he places on spirituality. In comparing himself to his peers, he often feels different from them. At times, this leads to uncertainty and feelings of insecurity. He also sometimes feels uncertain about his future plans.

- **Relationship with the parents**

Both Timothy's parents have tertiary education training and are qualified teachers. He mentions positive relationships with both parents. He esteems his father highly and views him as one of his role-models. His father is very supportive in developing his potential. His mother, in turn, inspires him to respond empathically to his environment, such as taking part in campaigns in support of those who have cancer. With regard to his learning and developmental process, both his parents provide support and advice. They assist him in important decision-making processes, such as in taking up extra tuition on his subjects of main interest. They do sometimes disagree on certain issues. Timothy tends to avoid conflict and wait for time to heal the disputes. He explains in his own words:

> … sometimes we differ from one another … I'd rather leave everything and see how it goes the next day … but they really help me a lot, especially with the school work, especially my dad …

- **Relationship with peers**

Timothy seems to enjoy his interaction with close friends. He has quite a few friends of his own age group, as well as older friends. His friends are a source of motivation and they support one another in their learning process. He looks forward to seeing them every day.

> … I enjoy the conversation, the motivation we give each other, how we build each other up, so, yes, Miss, I like to be among people.

The friends, however, stay far apart from one another and this inhibits close contact after school. They keep up the communication through cellular messages. Thus he does experience peer-support, but not to the extent that he would like. He also mentions that he and the other two participants in this study are close friends at school and most of the time they form a support network, work on projects and attend workshops and other academic opportunities together. They inspire one another to achieve and would never make fun of each other, but would rather offer the necessary support.

Despite seemingly healthy peer relations, Timothy admitted to sometimes experiencing loneliness, having a sense of not being the norm and sometimes prefering to work on his own and be alone. During the focus

group interview, he shared certain challenges arising from being seen as particularly intelligent. The top performers in the class often experience envy from the other learners, which puts them at risk of being bullied, rejected, isolated or labelled. Some of his peers lack self-discipline, are disrespectful and at times very envious of his academic achievements.

> Sometimes I think it is good to be alone, especially to work alone to be on your own, but then I also think that you need friends … in my opinion it will probably be discipline and respect, that is what most children lose … that influence others like those of us who want to do well and then you get some who want to push you down by, how can I say, making a joke …

- **Relationship with the school**

He enjoys school and views going to school as his current occupation. He works conscientiously and prefers tasks which call on his abstract thinking skills. He prefers subjects such as Science and Mathematics.

The school provides extra classes and support in the form of group studies in certain subjects such as Science and Mathematics, but these are not necessarily directed at learners' unique needs. Rather they favour the learners who struggle in these subjects. This kind of support occurs somewhat haphazardly, whenever someone is available or willing to offer support. This results in Timothy experiencing a lack of adequate enrichment in areas in which he sometimes needs guidance, such as Science and Mathematics.

> … and another thing is that the way in which they support you, sometimes they support you but then you feel as if they didn't really help you or sometimes you really need the support of the school but then they also don't offer anything.

According to Timothy, the teachers' styles and support vary. Some present their subjects creatively and with enthusiasm. They prepare well for their classes and also make themselves available to give the learners additional support. Timothy suggests that the top performers in the school do get respect from their teachers and their efforts are also valued. The teachers have high expectations of them and tend to place a lot of pressure on them to perform and achieve well.

> … all three of us are in one class where many of the teachers look up to us, they expect a lot of us, because we are top in the class … there are many people who expect a lot of things from us … and we know what is expected of us … because there is such a lot of pressure.

They are therefore fully aware of the pressure to achieve academically. At times, Timothy feels the pressure and this can make him anxious. He finds that he has no free time to socialize, relax or be creative. Despite this, he admits to having a survival instinct and a strong inner locus of control. He manages to handle pressure well enough to be highly productive, despite his anxiety.

Timothy contends that the way in which some subjects are presented lacks creativity. They are required only to re-write or copy large volumes of information from the projector screen. Besides being quite boring, this

is also time-consuming. This leaves insufficient time for the teacher properly to explain the work. According to Timothy, this method of teaching is ineffective and needs reconsideration.

> If there is another thing that I would like to change, it is probably the way in which the subjects are offered … we have to write down the work so that our books are full … last year we had to take extra classes … because the work became so much … because we had to do such a lot of writing … to catch up with the work … because there are many cases where we are behind other schools …

Timothy mentions that the classes are overcrowded and that certain learners take subjects while not having the ability to pass them. These learners are a major distraction in the class, at the expense of those who want to excel. He mentions that it is quite frustrating to sit and wait for these learners to catch up with the work. This leads to a loss of interest and boredom, so the top performers are left having to accept responsibility for their own progress. They are also expected to help the other learners who struggle, which causes them to lose focus and concentration.

> … they also waste our time, because the class is so full that sometimes there are periods that pass without us getting any teaching in that subject … because there is too much noise … it influences you as learner who maybe excels above the others and it brings you down …

He suggests that a more flexible curriculum, with a broader scope of subjects, might possibly limit the problem of too large classes and learners who struggle because they are not interested in the subject content.

> … to have other subject choices … or a subject that most children are interested in … so this is something I would want to change, the fact that children ought to have other subject choices.

- **The role of the community**

Timothy lives close to the public library in his community. The library has a set regulation of a one-hour limit on attendance and an entrance fee to ensure that youngsters from the street do not visit the library merely to socialize or to vandalize it, as this is a very disruptive community with many gangster groups. Despite these regulations, he often attends the library to do research.

He also uses his cellular phone and the internet as resources to do research and obtain information, as the facilities at school are very limited. He mentions that using his cellular phone gives him quick access to information. He attends extra tuition provided for students at a college as well as at another high school. The high school is in the same community and makes its facilities available for tuition in Mathematics, Science, Biology and Accountancy, as well as English. The rationale is to assemble learners and reach as many as possible from the various schools in the area to work collaboratively on academic difficulties in these subjects. Tutors from the college facilitate these extra classes. Timothy's main concern is that the classes clash with those from the college. He mainly attends the classes at the college on Saturdays, as the time suits

him better. He is sometimes selected to attend winter schools at universities, where many opportunities open up to him of which he takes advantage.

In conclusion, Timothy is knowledgeable and has a rich inner life. He is passionate about life and about wanting to make a difference in his environment. Advocating for social justice is at the core of his being. He aspires to follow a course in pathology and would love to further his studies at Stellenbosch University as his first choice of institution.

4.2.1.2 Participant B: Natasha

Natasha resides in the same low SES community as Timothy and attends the same school. Natasha's father works in the building trade, mainly as a carpenter and sometimes as a plumber. Her mother is currently a home-maker. Natasha and her brother, who is in Grade 8, as well as her two older sisters, live with their parents in a particularly indigent part of the community. Her eldest sister completed a Diploma in Office Management at a Training College in the local area.

- **Natasha's understanding of giftedness**

As was the case with Timothy, Natasha identifies gifted individuals as people who mask and hide their abilities in order not to draw unnecessary attention to themselves. They may be shy and reserved and do not favour the spotlight.

- **Inner world**

Natasha's collage showed that she sees herself as being "*in a class of her own*". She is an individualist with many interests. She loves music but is not particularly good at sport, although she takes part in cricket and would also like to learn to play tennis. She would love to travel. Reading is also a passion and she enjoys reading English mystery novels and biographies as a way to relax. Natasha also sometimes writes stories. She describes herself as being lively and energetic. She enjoys any challenge which requires analytical thinking and problem-solving skills.

Natasha is a private and sensitive person and keeps a special notebook in which she collects quotes depicting life truths and wisdom. She feels strongly about staying true to herself and says that "*it's better to be hated for what you are than to be loved for what you are not."* She considers this characteristic as one of her particular strengths. She rates honesty and diligence highly and describes herself as being a good listener, being empathic, friendly and helpful. She places a high value on living according to her own moral code and is extremely distressed by the choices her peers make with regard to morality and sexual behaviour. Stress can, however, evoke strong emotions in her. She experiences life intensely and the social issues of the day often cause her distress. She explains in her own words:

> I am an honest person, I am hard working, I am very friendly … if you need someone to talk to, I will always be there for you … I like listening, I only listen … I mostly keep to myself … it's just that social issues and such things touch me …

She is not a church-goer and not a particularly religious person. Being strong-willed, intense and temperamental, she enjoys the calming and soothing effect of the sea. She often feels misunderstood, as though nobody understands and appreciates her. She tends to mask her loneliness and feelings of alienation, which causes her a lot of ambiguity, since she feels strongly about being true to the self.

> So alone, as if nobody understands me. I feel so much as if I am alone in the world as if I don't belong anywhere.

In both the individual and focus group interviews, she identified her volatility as a weakness in her personality. She also suggested that she lacked the skills to endure and persevere when something was trying or difficult. She admitted to feeling depressed and at times lacked self-motivation and inner strength. She needs variety in her activities as she becomes bored easily.

> Because sometimes I am very friendly or I am the one who only laughs, but then I change quickly into a devil if you said something about me … but I don't have – how can I say – perseverance … then I get tired and then I leave everything … and then I just throw in the towel …

During the individual interview, it became evident that Natasha is academically competitive and puts herself under extreme pressure to achieve well. She is not prepared to compromise her own standards. Natasha is responsible, conscientious and regards academic excellence as fundamental to her being. She suggests that she is constantly misunderstood for maintaining a high academic standard.

> … but I can just not bring myself down from where I am now … my standards are too high and they don't understand that …

Due to the amount of homework in Grade 11, she spends most of her afternoons on assignments, leaving her limited time to pursue her other interests. She has identified herself as a visual learner and frequently makes use of mind-maps. She draws the essentials from a text and then elaborates on them in her own words. She prefers to begin to study two days ahead of a test or exam, as she forgets the content of her work when working too far ahead of time.

- **Relationship with the parents**

Natasha's relationship with her mother is mostly good, despite occasional arguments. She mentions that her mother and her one sister are both supportive of her academic aspirations. Her relationship with her father, on the other hand, is difficult and characterized by constant conflict. He tends to be critical of her and places constant pressure on her to excel, despite not offering the necessary academic and emotional support. She explains as follows:

> … but my father always expects me to do better and better, that's why I don't have a very good relationship with him, because I just feel that he, how can I say, he does not really support me, it feels as if he always criticizes me …

She finds it difficult not to argue with her parents and is consequently seen as disrespectful. Her relationships with both her sisters are also characterized by sibling rivalry, as she has a strong personality and a mind of her own. They regard her as insubordinate and temperamental. Her brother also mocks her and suggests that she will be an academic failure and will be put to shame.

- **Relationship with peers**

Natasha describes her relationship with her peers as uneasy. She does not seem to get along with them and mostly feels unhappy and alienated from her peer group. She experiences much envy, gossip and ridicule from them because of her academic achievements and believes that her peers would be more inclined to accept her if she lowered her standards. She finds her peers mostly immature, frivolous, and lacking in concentration and respect for authority figures and fellow-peers. Due to their behaviour towards her, she tends to keep them at a distance, but does assist them when necessary. According to her report, she faces much competition and resistance at school due to her need to achieve academically

> … I am the top achiever in the grade now, I feel that others judge me, they all expect me to be full of myself and they don't understand, I am actually very down to earth but that doesn't prevent them from making up stories about me … so they will rather like me more if I achieve less … Most of the time I don't feel happy … For me it is that I am on good terms with all of them, but sometimes they are too frivolous, they don't concentrate, they just make jokes, they joke the whole time in class … it's a kind of jealousy type of thing.

She finds it difficult to maintain long-term relationships. She explains that she values stability and honesty in close friendships, as her nature makes her sensitive to others' remarks. She is also in need of acceptance, but her relationships with others tend to fail. At this stage, she prefers to keep to herself. She does however have one close friend who is very supportive and encourages her to keep up her academic standard.

> My friendships usually don't work out … probably my volatility … I probably have issues about rejection or something … because nowadays everybody is so false, they gossip about you behind your back … I actually only have one good friend … she is very supportive … because the kids in my grade don't like me, again it's about that top achiever issue.

Despite her negative experiences with her peers, they tend to make her a group leader when they have group assignments, although according to Natasha this is only for their own benefit and not because of their acceptance of her. She therefore dislikes working in groups.

> I don't really like group work … sometimes it feels as if they let me do all the work, I have to do everything.

She admits her loneliness and exclusion in the following words:

> … then it's the whole time alone in the class and lonely and so a person can't get on on your own, you need people around you.

- **Relationship with the school**

Natasha is not very enthusiastic about school, but is interested in subjects such as Science and Mathematics. She enjoys the challenge presented by these subjects and the space to practise her particular abstract and analytical thinking skills.

From both the individual and focus group interviews, it is evident that Natasha questions the school's ability to render her the necessary support. She feels that the school is not prepared to go the extra mile to sufficiently support all learners in their specific needs and also does not succeed in motivating learners like herself to fulfil their potential. According to her, the school expects them to achieve, takes pride in their academic accomplishment and benefits from them, but fails to provide any support.

> I don't feel that my school supports me, I don't know why, but I feel I don't get that necessary support from them … The school won't take the steps to maybe motivate us. You might get your pat on the back, you did well, but you don't get more than that, absolutely nothing.

She also argues that the computer facilities and resources to support research are too limited and thus do not aid their academic development.

> The computers, there actually aren't any computers … to me it's not sufficient.

During the individual interview, Natasha disclosed that she experiences school as frustrating and lacking in quality learning opportunities. The learners mostly struggle with the work, forcing the teachers to slow down their rate of instruction, causing her frustration as she has to wait for the rest of the class to catch up with the work, so that she becomes bored. The learners also make fun of the learning process, resulting in her questioning the value of schooling.

> … because the quality is not so good … the teachers go a bit slow … then it feels as if I don't know what to do, then I only sit there … some of them take their school work lightly and then it feels to me as if they're wasting my time …

She finds the way the teachers relate to the learners rather challenging. The teachers tend to make derogatory remarks which she finds offensive and which demotivate her. She explains in her own words:

> For me, it is when our teachers reprimand our class, I have a bit of a temper so I become rebellious and I don't want to work and then I just sit, then I am sort of on a strike and then I don't work.

According to Natasha, their subject choices are too limited, and she suggests that the curriculum should be adjusted to provide more options to those learners who actually hinder the teaching in subjects such as Science, Mathematics, Accountancy and Biology. According to her, some of the learners are not interested in these subjects and also do not have the ability to do well, and therefore disrupt these classes and hinder those who do want to achieve. She further suggests that learners should be divided into class groups according to

their intellectual ability. She argues that this would allow those who were more proficient to study together and at an advanced rate.

Natasha is also frustrated by the expectation that she, as the top achiever of the class, constantly has to assist other less able learners at the expense of her own academic excellence and development.

> … they often ask me to help them with their school work …

Everyone expects so much of her academically and pressures her to keep up her performance, since she has been the top learner of her grade and school for the past three years. She mentions that the pressure is constant, causing her much stress and agony. She explains that, if she does not achieve at her peak, the teachers makes degrading remarks such as "*welcome to the real world*". These remarks affect her at an emotional level and influence her behaviour negatively. She has considered lowering her standards, as this might allow her not to feel so pressured by others' expectations of her, but then again she cannot compromise on her own expectations and goals. She is also worried that the academic pressure does not allow her time to relax and be creative.

> It's that top achiever story again, everybody expects that I have to do my best … it's just that there is too much on me. Sometimes I feel that I should just step down because that will take all the pressure off me, but then I feel it will be humiliating if someone else takes my place …

- **The role of the community**

Natasha attends extra classes, such as "Star Schools" on Saturday mornings, which are provided in her community. The only obstacle she experiences in this regard is a linguistic one, as these classes are only given in English so as to include the diverse culture groups which attend the classes. Her language of instruction at school is mainly Afrikaans. She lives far from the libraries, both in the affluent community and in her own community. She can therefore not rely on any of these facilities. As they do not have a computer or internet facilities at home, she uses her sister's cellular phone to search for information on the internet.

Natasha aims to further her academic career in Physics at a university, as she wants to ensure a better future for herself and her family. Her parents, however, do not have the financial means to support her in this dream.

> … now I see how difficult my mum and dad have it … because there is no money … that is why I want to go to university, because that will just give me that better qualification to get a better job.

4.2.1.3 Participant C: Queen

Queen lives in farming community in another town, 40 kilometres from school. Her community is characterized by poverty, unemployment, alcoholism and violence. She takes the bus to school and attends the same school as Timothy and Natasha. She is also in the same class. Both her parents are employed. Her father works at a wine cellar and her mother is a cleaner at a spa. Her mother has done a short training course

for her work, but does not have any other tertiary education. Her father has no tertiary education. She has an elder sister of approximately 30 years of age, living in Gauteng. Her sister has caused the family much heartache. In contrast, Queen tries her utmost to show her parents the necessary respect and always strives to work diligently at school. She also has a younger brother of seven. They are both living with her parents.

- **Queen's understanding of giftedness**

Queen did not disclose any opinion with regard to her understanding of giftedness.

- **Inner world**

Queen appears to be resilient, energetic, enthusiastic, spontaneous and positive. She shows empathy with people who struggle financially to make ends meet and has a lot of respect for others. She also feels responsible to make the world a better place for others. In her collage, she presented herself as a happy child, being close to her caring and happy family:

> Am very excited … and this is my little family, Miss, we are a very happy family together, a small family, Miss, a small family, we're always there for each other …

She seems to be interested in girly things such as fashion, and her role model is a highly successful African celebrity figure who inspires her to be unique and different and to work towards a life of success and money, one very different from her current circumstances. It is important for her to make a better life for herself, to be somebody that others can recognize and look up to.

> This is my role model, Toya Delazy … She is unique, Miss, she is a musician … has her own style … she is multi-talented, I like her a lot … she is not married, she sings … she is a presenter, she is a radio DJ, she models part-time … and you know how famous people are and so, yes, Miss, I also want to be like that … as in multi-talented. As in I want to have a better life than I have now, Miss. I want to be very rich … I want to be proud of myself and I want to look back and say I made it and so people have to look up to me …

She leads a very active life, has a passion for Science and Mathematics and singing and appreciates artwork done by others, although she cannot draw herself. She reads romantic novels and enjoys watching sport on television, especially soccer, although she does not engage in any sport herself. Her collage suggested that she has many strengths and the data from the individual interview confirmed this. Queen feels that she has many strong points in her favour, such as a positive outlook on life, but she is well aware of how difficult life can be and how you have to fight for what you want. She explains this as follows:

> Life is a hard reality, Miss, it is very difficult to make a life for yourself … I grab at opportunities with both hands and I do with it … what I think will be right for me … I do not let it get me down, Miss, nothing, Miss.

She is a moral person and also hard-working and conscientious. She has an exceptional aptitude for languages and can speak five languages. She displays a positive self-image, self-confidence and resilience, will never back down on a challenge, and is not easily swayed by others' opinions:

> I am a positive person and I am always positive and I am never negative, if you are going to say something to me that will make me feel bad then it is the way that you are, you think like that, that is not how I see things, it is your idea and it is what you think, I am on the way … I am only positive and I think positively and I do positive things, I am responsible … I have always been a responsible person from when I was very small, I was always the odd one out, Miss, as they say. I am unique, I am who I am, I will not be like you, I keep myself away from wrong things and I stay a positive person …

She is goal-oriented and sets herself goals such as aspiring to go to university and making a difference in her community. Queen wants to become a motivational speaker and feels and cares for her environment. She is deeply touched by the poverty in her community and reflects on social and moral issues. She is especially worried by the wrong choices her peers make. She is keenly aware of what is right and what is wrong and seems to know what should be avoided in order to be successful in her own development. She further identifies her leadership qualities as a strength although she feels constantly pressured to be an example or a type of role model to other learners.

Queen appreciates quotes of wisdom and uses these as life mottos to guide her decision-making and choices. For example, two of her favourite quotes that direct her behaviour are, *"I always strive to put myself in my contestant's shoes to understand their side and culture"* and *"Die mens wat die grootste sukses behaal, was dalk al teen die planke na 'n uitklophou, maar gelukkig het hulle nie gehoor hoe die skeidregter hulle uit tel nie." "The person who achieves the greatest success might have been against the floor after a knockout, but luckily they didn't hear when the referee counted them out"*. She is most definitely a resilient person who perseveres with courage amid adversity. For her, success does not come easily. She recognizes that failure and criticism are part and parcel of life and that it takes perseverance to be successful. She elaborates as follows:

> That everyone who is successful … as in they have achieved their dreams and so on, it wasn't all an easy ride for them and even though they were criticized … they kept on believing that they would make it one day, and that is how I feel.

Queen is keenly aware of the possibility of failure and of criticism from others:

> As if, Miss, I am afraid of failing, I am afraid of failure, Miss, I just don't know, I am afraid that I will disappoint my parents … so that people cannot criticize me and so on …

Queen has high expectations of herself and is seldom happy with what she accomplishes in school. She acknowledges being a bit lazy at times, but tries diligently to study what she learns at school each day. This makes it easier to prepare for tests and exams. She summarizes the work and uses a rote-learning style to prepare for exams.

- **Relationship with the parents**

Despite them being a small family who cares much for one another's well-being, Queen gets little support from her parents academically as they do not seem to understand her specific educational needs. She has to

rely on her intrinsic motivation and her strong desire to escape her current reality. This results in loneliness and feelings of isolation from her family. This is often challenging and difficult. Her parents are not really interested in her academic work and do not support her academically. Her mother will occasionally respond with a positive remark, but not her father.

> … my parents don't really care, like my dad never even looks at my report card, then I am so glad that I have a good report from the school, then he will not even go to the trouble to look at it, my mum will still look … my dad isn't interested at all.

- **Relationship with peers**

She describes herself as extremely sociable and relates well to most of her peers. She is supported by some of her peers who motivate her to keep up her academic achievements, but some of the girls tend to be envious and the boys make frivolous remarks.

> … I like being with my friends and my classmates … I feel I am at ease with them, Miss. … the children in our class … they support me a lot, they will motivate me and so on to work harder and to always believe in myself … the boys are a bit too frivolous and so on and especially the girls are jealous and so on …

During the focus group interview, Queen explained that, despite positive experiences with her peers, she is sometimes negatively perceived because of not being of the same ethnic background as the other learners. The majority of her peers are disrespectful towards authority and other class members and in general tend to misbehave. They tend to call her names and are nasty with the more academically oriented learners in class. She finds this challenging, distressing and demotivating.

> Bad behaviour … like in our class … and it distracts you from the work … and it is very difficult … I am a black girl, sometimes it makes me feel bad to call me names and to say bad things to me and so it hurts me … not feel like learning in class and so on.

- **Relationship with the school**

Queen mentions that school can sometimes be challenging, as she is a black person in a predominantly coloured school, but considers this a good experience as it helps her to understand other cultures and broaden her scope. Classes are overcrowded and many learners are taking subjects in which they have no interest. These learners make fun in class and are major sources of frustration and distraction. This is particularly challenging for her and the other learners who want to excel academically. The disinterested learners tend to label those who work hard in school, subjecting them to gossip and name-calling.

> ... sometimes it is difficult in class … we are a lot of children in the class, always someone who tries to distract you … they don't allow you to focus … children who want to learn, who want to be there must take the subject … and many times people will label you if you take subjects … they criticize you … everybody's talking about you at school …

The atmosphere of misconduct and disrespect at school affects her emotional well-being and she would appreciate a change in this situation. There is a particularly negative atmosphere in the school and the majority of the learners are extremely unmotivated and uncooperative. She explains further:

> … there is no positive spirit in the school … the children only go to school because their parents want them to go to school and they don't really have a goal … things are very confused, Miss.

Besides the above challenge, she also experiences pressure from the school to achieve academically. This however tends to motivate her to remain focused and to work diligently. She did not further elaborate on the challenges at school or the kind of support the school provides. She did mention that the school makes an effort to expose them to the opportunities present at universities. She assumes that this is on way in which the school attempts to support their learning and keep them motivated to excel.

> … so you must always work hard to get good marks … it actually motivates me, Miss, it makes me work harder] [A lot of us get sent away to university … I think they want to motivate us and help us to work harder to get there some day … that is how I think they support me.

- **The role of the community**

As mentioned before, Queen lives far from school in a farming community with no access to a library or computer facilities. She finds this quite challenging. She mentions that her community is aware of her academic achievements and holds her in esteem. They encourage and motivate her to continue in her academic endeavours and be strong enough to become successful.

> … I work hard, the fact that they never see me outside … they actually motivate me … my community supports me. I do not have access to a library … I use information that the teacher gives … I have a cell-phone … then I Google … I don't even have a computer at home … that is why I write it myself at home. If there were a library … and if I had a computer at home … lots of access to lots of things … that could have helped me, like books that I could read and such things.

Queen is inspiring and represents a message of hope to others in adverse circumstances. She is resilient, positive and has a lot of energy which she channels into her drive to make the best of all the opportunities presented to her. She is a moral person and particularly future-oriented, with a strong sense of her place in the community and the role that she can play to help others to surpass their own limitations.

4.2.1.4 Participant D: Jan van Niekerk

Jan van Niekerk lives in an affluent part of the town and attends a nearby school. Both his parents have tertiary education. His father is a medical practitioner and his mother was previously the supervising manager of a large company, but is currently a home maker. Jan is part of a large family and is the second

oldest. They are four boys and two girls. His older brother is currently studying engineering at university, while the other siblings are still at school.

- **Jan's understanding of his own giftedness**

Jan describes a gifted person as somebody fully aware of his or her exceptional intellectual ability but too lazy to make an effort to excel. This person may mask his or her true ability by blending in and achieving good marks without any effort from his or her side. He explains as follows:

> … that the person is very lazy and like knows that he is intelligent, that they do not want to put in effort to actually show it, then they can often look very normal but in fact they put in a quarter of the effort that most other people put in to get the same as the norm.

- **Inner world**

During our first meeting, Jan appeared to be a sensible and intelligent boy. He was honest and prepared to answer my questions openly, while displaying a great sense of wit.

In his collage and during the individual interview, Jan introduced himself as an interesting individual who had a talent for designing innovative scientific objects. He is interested in various scientific fields such as mechanical and chemical science and engineering, and enjoys new technology and machinery. He also has a keen interest in Mathematics. He is a good sportsman, who especially enjoys team sports like "tou-trek" and plays rugby which, together with his faith, is one of his passions.

> … I know I don't give of my best at school at present … my favourite sport by far is rugby … it's the sport that I'm most interested in by far … And then one other thing that is also very important in my life is my faith, it is a big issue, it is very important to me … to me it is my value system and what I believe in is very important …

Jan is a Christian and his faith informs his perspective on life and his value system. He is growing up in a religious family, where Christianity is given centre stage. He believes that one needs to have a spiritual connection with a God who links him with his purpose in life. He believes that one's life is connected to a destiny determined and directed by God, who is higher than himself. He also regards high moral values as absolutely essential. He expresses his wish to live a life according to spiritual principles. He tolerates no compromise and has an active conscience when he does falter. Jan also believes that he is 'called' to make a difference and be significant in his environment, especially with regard to those in marginalized communities, to improve their living conditions:

> I don't know how you can live if you do not, if you feel that you are here just by chance, you just came here and you don't have a goal and you have no value and it's actually just sand and carbon and so on that came to be out of nothing. That is just totally against what I think, I believe there must be something why you must be here … my goal in life is to make a difference in the world … I want to design something that will improve people's lives, people who are disadvantaged …

Jan explained that he loves being witty, and creatively 'playing' around with words. He also cares for people and this is his way of influencing others' lives in a positive way.

> I like it to use sharp words or to use words in smart ways to be funny, but also I like it … it is how I make jokes but I enjoy jokes in general, I laugh a lot, I probably laugh the most of all my friends … I will try, if I hear someone made a mistake or so, then I will maybe put in a clevert word just to be a little funny or so. It is also one thing that is somewhat important to me that you have to care for the people around you …

He admits that he is not particularly fond of reading but does read English books. He prefers to think in English. He is interested in history, especially defining events such as the 2nd World War. The way people think and conceptualize their understanding of life issues intrigues him.

Jan's family and friends are extremely valuable to him. He is a loyal friend and prefers relationships that are authentic. He describes himself as sociable, loving, caring and empathic and is easily distressed if people are ill-treated, especially those who lack opportunities in life.

During the individual and focus group interviews, he disclosed that since he had been a small boy (approximately 5 years of age) he had seemed different from his peers. People would remark on his abilities, interests and hobbies which were different from the norm. He never spent time watching cartoons as his peers did, but instead watched documentaries such as Discovery or the History channel. He also has the ability to do difficult mathematical calculations without actually writing down the steps. He finds his inability to explain how he has reached the solution to a problem frustrating and would even correct the teacher's memorandum or mistakes in the textbook. He explains this particular frustration as follows:

> … sometimes I will only look at a mathematics problem that the teacher hasn't even explained yet, then it will in my head, then I will be able to do it and work out a correct answer in my head, but I won't be able to say how I did it. It happens to me often, it irritates me because then I will be able to give the teacher the answer and then I won't be able to tell her how I got it … they once gave a word problem that the teachers could not figure out … then I worked something out in my head till I got something that worked, then I told the teacher that it works out but I couldn't tell her how I got it and which steps I followed, so it happens to me often.

Jan suggests that among his strengths is his ability to listen and to be honest in his interactions with others. He is not prepared to compromise on honesty in his relations with others and will not keep silent for the sake of peace when justice is at stake. He is prepared to act as a leader but is not interested in being an official leader at school, as the selection system is based on favouritism and prejudice.

He discloses that a weakness is his postponement of academic assignments, as he finds them quite boring. He is also easily irritated by others' lack of insight and can become annoyed when he has to explain the obvious to others.

He has no particular study habits, as he generally does not study at all. For subjects which are content-based, he merely reads the work if he feels up to it, but in Science and Mathematics he does absolutely nothing.

- **Relationship with the parents**

Jan's relationship with his father seems to be a special one. They share a particular sense of humour and their inquisitive minds. His father will always acknowledge and support Jan's efforts and encourages him to perform to his personal best. He wants Jan to maintain a high standard. His father is also prepared to help with additional information in the areas where he is knowledgeable. The rest of his family will express their appreciation, but will rather engage with him in a playful way - mocking and teasing each other – rather than being supportive like his father.

> In my family it's not really that the brothers and sisters will say to you that it's well done, except if you did exceptionally well, then one will tease the other, we don't really support each other, we only tease each other a little with things like this …

- **Relationship with peers**

Jan is sociable and has good friends. He belongs to a group of friends who share his values. He does engage with peers who do not support his values, but then attempts to set a good example and be a positive influence. His friends try to influence him to study more. He knows that he has only himself to blame for not doing his best.

> Yes, my friends always try to motivate me to study, honestly in general I almost never study at all, and then I know that I'm disadvantaging myself …

- **Relationship with the school**

Jan has mixed feelings about school. On the positive side, he is one of only a few learners in Grade 11 who take both languages (English and Afrikaans) at first language level and therefore continuously finds himself in the fortunate position of being in a less overcrowded class. The teacher has the time to focus on each individual's specific learning style and needs.

Jan has more to say on the negative side of schooling. Firstly, he feels strongly that the bright learners are kept back by learners who find the work more challenging and prevent the teachers from picking up the pace. He cannot work at his own tempo and consequently becomes extremely bored. Secondly, most teachers lack the ability to differentiate the curriculum so as to address learners' individual needs. They tend to work according to the slowest learner's pace and Jan finds this demotivating. His current Mathematics teacher does however employ differentiated teaching methods to accommodate each individual's needs, but this is far from the trend in other subjects. This teacher also supports him and constantly motivates him to fulfil his potential. Thirdly, Jan finds that he is constantly expected to explain work to his peers. He is prepared to help, but does not like to explain the same work over and over. He finds difficulty in understanding other learners' inability to grasp the work that he has already mastered. He explains his reaction and their responses in the following words:

> … then I have to go and explain it to them and so on, so I also do that regularly … but if they make ridiculous maths mistakes and so on, then I can sometimes not help but laugh at the mistakes they make … that is now something I am particularly good at, Mathematics and Science … I can sometimes not help but laugh at it and to them it sometimes feels offensive, because they sometimes feel as if I think I am better than them at Mathematics and that is really not what I am trying to do.

The fourth challenge that he experiences in the school is with those learners who lack respect for order and discipline. Their conduct is a distraction to the rest of the learners and he finds it quite difficult to sustain focus and attention in class. Fifthly, he explains that most of the teachers lack the necessary authority and the ability to discipline and control their classes to the benefit of all learners. He elaborates as follows:

> Firstly I think an area should be created where you can focus because the areas I think the modern school areas are places where it is difficult to focus because where you are surrounded by friends and so on, there is too much distraction, if I can put it like that, for you to really be able to focus on your work and the other thing is teachers in general … you get those teachers that you have in class who have no control over the children and I just feel that teachers like that who have no control over their classes can't really teach because you are going to learn nothing in that class because nobody is going to listen to you because everyone is focused on the children who take over the class.

Jan is often reprimanded for underachieving. His Science and Biology teacher constantly reminds him of his abilities and is worried about him not making any effort to live up to his full potential. He mentions that the more pressure they put on him, especially in subjects in which he is not interested, the more he ignores them. It is only when he is interested in a subject that he will focus and try to achieve according to the teacher's expectations. Most often, in spite of the pressure from teachers, he finds it very challenging to break the habit of being too relaxed about his school work.

During the individual and focus group interviews, Jan contended that the current school system in South Africa is awful and suggested that it should be adjusted to accommodate all types of learners. He proposes that classes should be divided according to the learners' intellectual abilities, as this will make for less frustration and learners might be more motivated to excel according to their true abilities. He proposes that learners with the same mind-set and interests should be grouped together and that this could be done by thoroughly assessing the abilities of all learners:

> … children who are talented in certain areas should be put together, like for instance I would put all the children who are good at Mathematics and Science together so that they can have their classes together, because I mean they have the same mind-set and so on, and children who are good at languages I will put together … I believe it is important that they test you to find out how your brain works and then you have to work together with people who are about the same as you.

Jan is also not very positive about the new curriculum and compares it to what happens internationally. He strongly feels that learners are not well prepared in this country for the transition between secondary and tertiary studies. He believes that the gap between Grade 12 and university is too big and that South Africa is compromising on educational standards. He explains that internationally learners have to perform to set standards to be able to make the transition from school to university. They are not merely accommodated, as he feels is the case in South Africa.

He also emphasizes the impact of technological advances on education internationally and feels that South Africa, by compromising educational standards, is lagging behind in educational improvements regarding gifted individuals and intellectual capital. He suggests that the education system in South Africa should make changes to keep up with what is happening at the international level:

> … just remember the world is progressing so fast at the moment that these small differences that we are making now we are going to have to make such massive differences and we can't really do that now, they are going to have to make a massive leap with Grade 1s and Grade Rs already because look the world is currently progressing 10 times as fast as it did 20 years ago and 10 years ago … overseas they actually have different schools, like they have a school for the more intelligent children and then they have a school for the next class and a school for the next class and it works much better because then you can still accommodate those people who are not so good and you can accommodate those people who are more intelligent and who want to go to university and so on …

- **The role of the community**

Jan explains that they are a well-off family, with all the necessary resources at home. He therefore never visits the community library or uses the computers at school. He does all his research through the internet at home.

In conclusion, Jan is complex and bluntly honest. He is not scared to voice his opinions. He lives according to a strict moral code, is serious about social justice and sympathetic towards those who cannot look out for themselves. He has a keen sense of humour and is obviously very intelligent, but is not motivated to do his best at school. He admits that he struggles to engage with subjects that are not of interest to him and realizes that he is losing out due to his lack of motivation to excel.

4.2.1.5 Participant E: Jani De Klerk

Jani lives with her mother and father in an affluent part of the town. She is the only child and attends the same school as Jan and Koos. Her mother holds a degree in Genetics and is a laboratory assistant. Her father, who is a viticulturist, has a Master in Science degree.

- **Jani's understanding of her own giftedness**

Jani understands giftedness as abilities that one possesses that others might not have. Those who are less gifted may need to really work hard to obtain similar results. These abilities of the gifted, however, may be disguised by the individual or may go unnoticed by others.

> It is someone who has abilities that I think other people don't always have or that they have to work harder to have … not everyone notices this.

- **Inner world**

Jani is a joyful, sensitive, sensible and bright girl who appears to be very active. She passionately shared additional information on her collage and her interests. She believes in being true to oneself and expresses this belief in the following quote: *"Rely on faith, love others, stay true to you and everything will be ok"*. She does not seem to succumb to peer-pressure but is prepared to be different. She has many versatile interests and tries to live life to the full and make something of every moment and opportunity. She is passionate about dance and has been doing ballet since she was five years old. She seems to be a talented dancer and has excelled in all her dance exams. She loves and listens to various types of music. She is also a good hockey player and has played tennis and swum in galas at school. Currently she does not have enough time for everything that she wants to do. She explains more about the role of music in her life:

> … I will either listen to music or usually … not very noisy stuff … more calm … I have to say the music that I listen to also sometimes depends a lot on how I feel … I will choose something more upbeat … sometimes when I don't feel well, I will listen to ballet music, then it makes me (feel) right again or especially a lot in the exam times.

Jani works well with metaphors. She likens her life to a tree and the process of life to *road works*. She explains in her own words her understanding of the process and the meaning of life:

> I think it means that everywhere along my path in life there are things that are being worked on everywhere in me, like for example with the fruit of the spirit represented with the tree, it is still influencing me and, oh, … I don't know, one has to walk and live so that you leave your mark, you must not just do useless things that won't leave a mark … I want to make a difference that people can see or that they can see that I am a child of God so that, maybe … , they may not follow my example, but that they … , yes, may see that I am someone to whom they can look up.

She loves quotations reflecting wisdom and uses these to ponder on the deep things in life. One of the quotes that she likes for example is, *'comparison is a thief of joy"*. She believes that this quote holds much truth and protects her from losing her joy and composure in life. She compares the surprises of life to standing with your back to the sea, not knowing what challenges or opportunities you may encounter. She appears to be emotionally intelligent and displays remarkable maturity in understanding various life situations. Jani describes herself as both introverted and contemplative, but also as very sociable when among her friends. When on her own, she prefers to keep herself busy with intellectually stimulating activities. She realizes that

she is different from her peer group in this respect. Jani also explains that she has the ability to intuitively make sense of academic puzzles and existential questions which others would not necessarily understand or appreciate.

She displays a particular sensitivity to spiritual and existential issues. She expresses her appreciation for having a sense of spirituality, connecting with God who constantly guides her on her life's journey. Her relationship with God gives her life purpose, meaning and inner strength, and also motivates her. This aspect of who she is can sometimes result in loneliness and being misunderstood by others. She shares that she keeps a journal to reflect on her deep inner experiences. She explains the above in her own words:

> … I can entertain myself … I am quite satisfied if I just sit in my room, the radio is on or I just lie on my bed … it's not necessary for me to always be with people, but when I am with people I enjoy it thoroughly, so yes … I think that I contemplate things a lot, sometimes I think that I think too much, I think and I overthink things … I don't know what awaits me, it's just I don't know what will happen in my future, but I don't know, I have peace with it and I know who I am and I know that that which will happen will happen for a reason, so that everything will be good and everything will work out well, not everything will always be good but the best things will come from it … we are not alone … I know when I have to talk to God … I have a little book and then I always write things in the book … I really didn't know how and when I was going to do things and then I just thought to myself I am dependent on God …

Jani mentions that she considers honesty and integrity as among her strengths. She is also patient, empathic, friendly, trustworthy and loyal. She regards her values as her guiding strengths and would not compromise for the sake of popularity or acceptance by others. Humour is an essential part of her life and she loves having fun. She mentions another strength, that of being focused and goal-oriented and willing to persevere in difficult situations. She talks about her perseverance as follows:

> … I am also quite goal-oriented … that was not so bad, let's do it again … I have perseverance … even if I'm so tired that I can cry, I will study till I'm finished …

Jani feels that, despite her ability to be patient in most situations, she still needs to develop more patience, especially when she reacts hastily to certain aspects in her life. She regards this in some situations as a weakness.

> … must get it done now or finish it now but with other aspects it is again different, I don't know, I'm just, I don't know, I'm probably too quick, I want to go everywhere too quickly …

Jani explains in her discussion of her collage that one should *"explore, dream, discover"*. She sets her own goals and does not rely on external factors to motivate her to explore, develop and achieve her own full potential. She believes that what is within you, your dreams and desires and the goals you set and desire for yourself, should motivate you. She draws upon her own internal resources to motivate her and keep her performing at her best at all times, despite sometimes feeling a bit laid back. Jani is further inspired by her

previous youth leader whom she regarded as a role-model, in spite of not really regarding role-models as a necessity for her life. She mentions that the large volumes of work sometimes stress her and make her anxious, until she starts finishing her deadlines and meeting her goals; then she seems to calm down and remain focused.

> I think, yes, you have to have dreams, you must sort of have goals and if you're not going to explore it and if you're not going to look at it a little deeper and maybe work for it then you won't discover new things about yourself and you won't grow as a person … you must stretch your own brain and you must do things for yourself … sometimes it gets a bit stressful when you realize that you should have been a bit further along … but once you start catching up then you become more calm … but I think you get healthy stress also that motivates you a little to work.

Jani uses a variety of study and learning methods, depending on the subject and the content that she has to prepare. She may use auditory methods, reading the work aloud to herself or she may summarize the essentials, for example in Biology, and then she will read through her summaries. For other subjects, such as Science, she will practice examples until she is confident she knows how to administer the problem. During exam time, she only summarizes the work two days prior to the exam and only studies the work the day before.

> … like two evenings before I write then I get all panicky because then I haven't really studied … I've always studied the day before …

- **Relationship with the parents**

From Jani's collage and the individual interview, it became evident that her family is very important to her. She describes them as being very close and intimate. She also describes their interactions with one another as rooted and connected:

> … family is very important to me and, yes, "your roots remain as one" … at the end of the day, we all come together again …

Her parents provide a secure and caring home environment that is very supportive and conducive to her academic performance and development. Her parents are good role-models in her life. She appreciates and rates their advice highly.

> … further what I really enjoy is my family and it doesn't matter what happens then, at the end of the day you can look back and then you say, oh, they were there … when I have to go and study for an exam then I think my domestic situation, I am very privileged because I have a door that I can close and I don't have siblings or anything like that, so it is very quiet and calm in our house … so my parents are, they respect, they will be quiet … my parents taught me perseverance, not directly, but indirectly … I think they motivate me quite a lot, yes, they have quite a large influence support-wise … it is actually quite funny to me how it

> works, the things you learn and the things you think and what you want to become, it sort of comes from them in a way, from your parents, without them teaching it to you directly …

- **Relationship with peers**

Friendships are important and valued in Jani's life. She uses many quotes to explain her understanding of how she views friendships and how she interacts with those around her:

> … and I quite like the quote "friendship is like wetting your pants, everyone can see it but only you feel the true warmth", that's very cute because to me it's quite true, I know people can see you have friendship but it's only for you because it will have a deeper meaning and other people won't always see it … I think it's very true that "strangers think I'm quiet, my friends think I'm outgoing and my best friends know that I am completely insane" …

Jani has a close, intimate group of friends at school with whom she socializes. She enjoys their company, as they share stories and make memories. This intimate group of friends support one another at every level of school, in academics, sport and when socializing. Jan, Koos and Jani belong to the same social group.

Jani, however, also experiences academic competition and jealousy, especially from the girls, and the boys tend to mock and ridicule her academic achievements, despite her not being competitive herself. She finds this annoying, as she considers herself a unique individual with her own set of abilities and hates to be compared to someone else. Among her peers from both genders she experiences a lot of falseness. She does not like this, as she is extremely honest in her relationships. She explains as follows:

> … there are always girls who are competitive and who always and then, oh, I hate it, I'm not competitive, I don't compare myself to others, I don't like it because this is me and these are my abilities and what not, but there is always somebody … jealousy … I hate it … I get so tired of it, it's a constant, I don't know, it feels to me as if someone is chasing me from behind but I can't care less if I do better than that person or not, but there is always … it's not nice, there are so many, so many who are underhand, but it's so sort of, it's so false actually … I don't like it …

- **Relationship with the school**

Jani is very positive about school and enjoys it very much as she can study subjects which are related to her interests. She appreciates her teachers and feels that they are knowledgeable in their specific fields of expertise. She mentions that she has positive relationships with all the different teachers and they get along well.

During the focus group interview, Jani was not sure how she felt about the support provided at school. She suggests that to some extent the school does expose them to opportunities, such as open days at universities, but other than that they do not really provide support. The school does however encourage them to remain focused to achieve academically. They recognize those who achieve academically by rewarding them with a

small fiscal prize and a certificate. The school also has sufficient computer and internet facilities to support learners in their academic progress; however, they do not have a library on the school premises.

Jani takes both her languages at first-language level and therefore most of her classes are not overcrowded, but in the Accountancy class, which is a larger class group, she experiences some challenges, as well as in other situations at school. Some learners are extremely impolite, lack respect for authority and disregard any form of discipline, disrupting the classes. Jani further elaborates on other challenges, such as learners who are slow to grasp Mathematics, so that she is forced to listen to repeated explanations. Sometimes the teacher gives the more able learners other work in advance, but sometimes she forgets.

> Sometimes in Mathematics there are children who are slower, but then I also hear it over again … then I want to say to the teacher, give us the homework so long, but then she is deeply involved in explaining something on the board, and then I just keep quiet and I listen again.

During the focus group interview, Jani explained that due to her academic ability she often has to explain work to other learners who struggle in class, at the cost of her own progress, and she finds this quite distracting. She suggests that to solve this problem the learners should be divided into class groups according to their intellectual abilities. She realizes, however, that this could cause a greater problem and that this dilemma is complex. Jani also expresses her concern at being pressured to achieve well. The top candidates are constantly reminded and expected to perform well. She concurs with the other participants that the curriculum should provide a greater variety of subject choices to accommodate more learner preferences.

- **The role of the community**

Jani explains that she hardly ever visits the public library as she has sufficient access to the internet at home. She explains that she is privileged, as they have a variety of books and other informative material at home.

> … when I have to do assignments, then I go to the internet, I can't remember when last I went to the library or took out a book, but we have quite a lot of books at home like encyclopaedias and suchlike from which I can also get sources, so, yes, I think I am privileged that the sources are available to me.

In conclusion, Jani is an interesting girl, with a wisdom and understanding of things of life which transcend her age. She cherishes a dream to one day work in a hospital environment. She has an aspiration to further her studies, preferably at Stellenbosch University, and to leave a legacy behind. This choice will be spiritually predetermined and guided by her sense of knowing that "*This is right for me"*. Her rich, deep inner life and natural sensibility are remarkable. As she puts it in her own words:

> ... people must remember that I was a light that shone ... they must just remember that there was something different about me ... that she has a good image and is an example to others.

4.2.1.6 Participant F: Koos

Koos lives on a smallholding about 20 kilometres from town, where his parents run a guest house. He attends the same school as Jan and Jani. His mother is a qualified high school teacher, but has been in the guest house trade for the past thirteen years, since the family's return from the United States of America. His father had previously been a missionary director and currently has his own estate agency business. There are four children. Koos is the youngest of the three brothers. His sister, the youngest of the children, is in Grade 8 and is home-schooled. His two elder brothers are both students at different universities.

- **Koos's understanding of his own giftedness**

Koos defines a gifted person as someone who is exceptional and excels. Such individuals will be recognized by their outstanding leadership qualities. Their natural abilities and talents in any field of expertise will be, even without any practice or effort, far above others' performance. He also explains that giftedness has many faces, and different people may show different aptitudes and strengths.

- **Inner world**

Koos has many interesting hobbies. He keeps a chameleon as a pet and enjoys listening to gospel music such as for example *Jesus Culture*. He plays pool and snooker for relaxation and enjoys fishing. He sets time aside for reading mystery or detective stories and has a passion for words, possessing a comprehensive vocabulary. Koos regards words as powerful: they can build or destroy another human being and should be used with great wisdom and discernment. He has a talent for creative writing and in his personal time attempts to write essays and mini-novels. He visualizes what he reads and then re-creates his own story from an existing one.

Discussing his personality, he mentions that he rates being honest and having a witty sense of humour as part of being a balanced and unique individual. He also describes himself as kind-hearted and observant. He is intuitively aware of others' emotions, even when they themselves are unaware. Empathy and harmony are qualities that he values. He describes himself as particularly time-oriented and does his school assignments well ahead of time to avoid unnecessary pressure:

> I always wear a watch; I always want to know what the time is … I don't like pressure, so if I have to do something like a task then I want to do it early, otherwise I think about it constantly and I stress.

Koos describes himself as active and good at sport, participating in cricket and rugby. His intellectual ability and his ability to relate, his interpersonal skills and qualities such as being trustworthy and empathic are some of his assets. His integrity is recognized by others as a strength. He is also a leader who does not compromise on values and advocates for social justice. He explains his leadership style as follows:

> I am a leader … I lead at school … I think a leader has strong values … I go against the stream. Fairness is important to me … I am honest … direct, yes …

Koos regards religion as an essential part of his existence. He believes that his sense of values is guided by spiritual principles. The Bible seems to be the foundation for his daily choices, and he describes his mind-set

and thoughts as innocent and kept 'pure', though sometimes he lacks the courage explicitly to display these qualities.

> I was told from a young age by my parents about Jesus and I also have strong values about how I live and … my thoughts are very pure and according to the Bible, but then I don't have the guts to live my actions … but I do have very strong values according to which I try to live every day … to just have a relationship with Him will change your life 100%, just to talk to Him, you don't have to feel guilty if you don't do it, that's also fine.

He may also sometimes lack drive and be laid-back, and he regards these as two areas in which he still needs to develop.

Koos's main subjects of interest are Biology and Mathematics. He seems to be very conscientious and diligently prepares his work well in advance, in contrast to other male peers in his class who does not attend to their schoolwork. He further explains that he experiences exams as very stressful. He does not like to cram his academic work. When he prepares for an exam, he learns all his work and especially his content work off by heart like an oral. He does not summarize when preparing for exams; instead, he merely memorizes by reading through the content.

- **Relationship with the parents**

Koos describes his relationship with his family as very close. His father is his role-model, who supports and guides him with wisdom and is his confidant. His two older brothers are also his role-models and encourage him to be diligent in his academic work. They have set an example for him with their own attitude towards academics. His parents support him by constantly affirming and encouraging him. He admits that he thrives on compliments and recognition in his quest to do well at school:

> My parents support me a lot … compliments and acknowledgement motivate me … but they still give me freedom, they will not be angry at me if I don't study. But they create the environment to learn.

- **Relationship with peers**

Koos shares that he has a close group of friends who support one another, have a lot of fun together and are building memories as a group. Among the other boys there is however a lot of tension and inter-group conflicts. He has various friends from different age groups in sport and he is also friends with university students.

- **Relationship with the school**

Koos enjoys school and experiences it as a safe environment which is conducive to his personal development. He also has positive relationships with the teachers and his close group of friends. The school does have computer and internet facilities, but for logistical reasons he never uses these facilities.

> I enjoy the relationships at school with my teachers and my friends, and I enjoy the safe environment that it brings, it's comfortable for me, I enjoy sport a lot, I enjoy orals …

Koos, like Jan and Jani, takes both his national languages at first-language level, and these classes are never overcrowded. He therefore feels that he receives sufficient individual attention and support. Despite this advantage, he says that due to the new curriculum some teachers rush through the work at the expense of those learners who might need more support. He agrees with the notion of presenting subjects on higher and lower grades. Koos also expresses his concern over gifted education in the current school system. He feels that, despite some changes in the curriculum, adequate provision is not made for their specific needs.

> Sometimes it frustrates me … the new curriculum is CAPS, which is a lot more work, so they run through the work without, if there is one child who understands, then the teacher assumes she can continue, so that is quite frustrating. There are many people behind me who don't understand anything, but they won't tell the teacher. I think they should bring back higher and standard grade … the needs are definitely not addressed sufficiently in the new curriculum … that is what they are changing now … the new curriculum is probably a step in the right direction, I don't know whether it's at the finish line yet but it is moving.

Koos feels strongly that the school should give learners the opportunity to work from old examination papers, as well as allowing them to view their end-of-year exam answering sheets, so that they can learn from their mistakes. During the focus group interview, he argued that classes should not be divided according to intellectual ability, as this would be to the detriment of both the more intellectual and the less intellectual groups. He explained that the bright learners would be more pressured to achieve academically, while the other groups would not be challenged and could be neglected because of prejudice on the teacher's part. He argues as follows:

> … there are upsides and downsides, the downsides will be that those learners, if they are in an intelligent class, will be pushed much more to work harder … if they're put in a class where everyone is equally stupid then they will simply not really work, there won't be the more intelligent learners who will push them and the teachers won't really care, because they know the children don't care.

- **The role of the community**

As indicated above, Koos lives outside town on a smallholding. He is not close to the public library and therefore cannot utilize this facility. At home, they have one computer which is shared by all the members of the household. He has access to the internet and uses it for all his research. He also mentions that he totally lacks any kind of communal support. He is not able to visit the public library and he does not have support from his community, as is the case with Queen (as told in the focus group interview). He says he would have loved this.

In conclusion, Koos shared that his dream is to become a veterinarian. He presented as a sensitive and imaginative boy who is mature for his age, honest and prepared to accept responsibility for his future. He is also considerate and caring, with a real empathy for others.

4.3 RESEARCH FINDINGS/EXPOSITION OF CROSS-CASE DATA

In this Section, the results of the cross-case analysis will be presented. The data gathered from the individual cases have been compared across cases. The findings will be presented and discussed in the light of the literature in order to answer the research questions.

The data will be presented according to themes and categories identified by means of qualitative content analysis. A summary of the themes and categories which emerged during data analysis is presented in Table 4.2.

The four themes reflect the lived experiences of the Grade 11 participants in relation to their giftedness, their current support provisions, and their perceptions of further educational support to meet their needs. The data presented in the following Section is taken from the three sources of data generated during the data collection process, namely the individual interviews, the focus group interview, and the individual collages of the participants.

Table 4.2: Themes and categories

Themes	Categories
1. Understanding of giftedness	
2. Support factors for academic success	Inner world Outer world
3. Unique support needs	Self Family Peers Community
4. Provision within inclusive education system	Curriculum Teachers School facilities

4.3.1 Understanding of giftedness

The participants recorded both similar and unique understandings of what giftedness entails. The majority contended that gifted individuals tend to mask their intellectual abilities and that others may be ignorant or not recognize their latent potential. They also attributed to them qualities such as being introverted, reserved, socially isolated (loners), and not favouring the spotlight or drawing unnecessary attention to themselves. This corresponds with the literature which suggests that gifted individuals may mask their true innate abilities behind a façade of indifference, because of possible peer pressure or fear of being singled out (Oswald & De Villiers, 2013). As discussed in Section 2.6.5.1, gifted potential may also be masked by underachievement, resulting in a negative educational trajectory (Gross, 1998; Kokot, 2011; Oswald & De Villiers, 2013), as reflected in the following quote:

> P – D: … that the person is very lazy and like knows that he is intelligent, that they do not want to make an effort …

One participant equated giftedness with leadership qualities:

> P – F: I think a gifted child will stand out among others and will most probably have a leadership role … and he will have talents that will be better than those of most other people without effort.

De Witt (2009) and Kokot (2011) confirm that gifted individuals may present with great sensitivity, a sense of altruism, and leadership qualities, displaying a positive self-concept and self-confidence which make them favourable group leaders among their peers. If their leadership qualities are not recognized or are misunderstood, they may conceal their strengths and present with unfavourable behaviour.

4.3.2 Support factors for academic success

The development of gifted potential and the achievement of success depend on more than innate ability. They depend on "person-context interrelatedness" (Tudge *et al.*, 2009, p. 199) or the reciprocal interactions (proximal processes) within the gifted individual's life-world (refer to Sections 2.5.1.1; 2.6.4 and 2.6.5) (Ceci, 2006; Kokot, 2011; Sternberg *et al.*, 2011; Worrell *et al.*, 2012). The life-world of the gifted individual comprises both the inner world and outer world. Conditions in both the individual's inner self and outer world must be conducive to challenging and fostering the realization of gifted potential if success is to be achieved (Kokot, 2011). The Grade 11 learners highlighted various factors within their inner selves and outer worlds which could be linked to positive learning experiences.

4.3.2.1 Inner world

According to the literature, the gifted person, representing the `bio' of the bio-ecological model, has distinct and unique innate characteristics (Bronfenbrenner & Evans, 2000; Tudge *et al.*, 2009; Swart & Pettipher, 2011). The gifted individual brings these characteristics to the various relationships in his or her proximal systems (Tudge *et al.*, 2009; Kokot, 2011). As active agents, such individuals possess distinct characteristic strengths which may contribute to their learning and success. To a certain extent, therefore, they can affect the developmental outcomes of their potential. Their resource characteristics represent, among other features, the available bio-psychological strengths and mental capacity in the individual. The participants in this study identified certain additional characteristics which they perceived as factors contributing to their success. They regarded their empathic, authentic, positive, energetic, passionate as well as humoristic takes on life as essential to being successful. One of the responses confirms this finding:

> P – E: … I have integrity … am patient … I have lots of empathy with people, I care for other people and I'm friendly and loyal … have values … I'm honest … I'm not going to lie … then I want to be the person they can come and talk to … humour is a large part of the way I live my life … I see the humour in situations … I will just give a belly laugh … I am also quite goal-oriented … that was not so bad, let's do it again … I have perseverance … even if I'm so tired I can cry, I will study till I'm finished …

Gross (1998) and Kokot (1994) suggest that gifted adolescents display a greater sensitivity to advanced moral reasoning and tend to have an intuitive discernment of both acceptable and unacceptable behaviour.

> P – C: I know exactly what I want to become … where I am going … I know what is right and wrong …

All the participants saw their high regard for morals and values as a protective factor. With the exception of one, they all underscored their faith and being connected to God as guiding factors contributing to wise decision-making. In the same vein, they also mentioned high emotional intelligence.

They further attributed their academic successes to certain "force characteristics". These refer to the drives and desires of an individual and are those forces which may either mobilize or interfere with the realization of gifted potential. Force characteristics include *inter alia* the individual's temperament, level of motivation and persistence (Tudge *et al.,* 2009). The subjects credited their success to persistence, conscientious and diligent hard work, being responsible, setting goals and valuing excellence as a standard of work:

> P – B: I am an honest person, I am hard working … My standards are very high …

> P – E: … I am also quite goal-oriented … I am quite persevering … even if I'm so tired I can cry, I will study till I'm finished …

The literature suggests that individuals high in force characteristics are more motivated and goal-oriented, as reflected in the findings. They seem to be more persistent in their task commitment and are therefore more likely to be successful in realizing their potential and reaching their goals (Papierno *et al.,* 2005). This perception was strengthened by their individual competencies, such as having analytical and abstract thinking and problem-solving skills. Further contributing factors included their strong sense of self, having self-confidence in their abilities and a positive self-esteem, as well as possessing leadership qualities.

> P – A: … my personality will bring me to where I want to be one day. It's also something on which I build that I know I can depend on … I have self-confidence and I believe in what I do and how I do it … I have a passion to solve things …

> P – E: ... you must stretch your own brain and you must do things for yourself …

One participant mentioned that he could not attribute success to his own effort or hard work, but solely to his innate mathematical and scientific ability.

> P – D: … I know I don't currently give of my best at school … sometimes I will just look at a mathematics problem that the teacher hasn't even explained yet, then it will in my head, then I will be able to do it and work out a correct answer in my head, but I won't be able to say how I did it.

In the light of this, it seems that gifted learners' inherent characteristics play an important role in their eventual success, despite environmental adversities.

4.3.2.2 Outer world

The outer world, as mentioned in Section 4.3.2.1, comprises the various systems which interact with the individual. As learning and human development do not occur in isolation, healthy and positive collaborative

relationships between the family, school and community are fundamental to facilitating and sustaining positive learning for the gifted learner. The best environment in which to cultivate talents and giftedness is therefore one with collaborative, supportive families, schools and communities (Al-Shabatat *et al.*, 2009).

The impact of the family on the gifted adolescent's development, socialization and realization of gifted potential is unquestionable. The literature reveals that parents play a fundamental role in offering, providing and selecting opportunities and experiences for the realization of their child's gifted potential (Perleth *et al.*, 2000; Schilling *et al.*, 2006). This notion is supported by the findings in this study. Some of the participants disclosed that their secure and stable home environments contributed to their success, especially when both parents had tertiary educational backgrounds as well as professional careers. As Freeman (2000) suggests, such parents seem to be more understanding of their adolescents' particular affective and academic needs. For these participants, the parents seemed more involved in motivating, encouraging and advising their children. They were resourceful and could therefore sufficiently provide for the participants' specific needs, enhancing their academic abilities and contributing to their successes. Both Freeman (2000) and Schoon (2000) support these findings.

> P – E: … further what's really nice to me is my family … my parents, they were there … when I have to go and study for an exam, then I think of my domestic situation, I am very privileged because I have a door that I can close and I don't have siblings or anything like that, so it is very quiet and calm in our house … so my parents are, they respect, they will be quiet … my parents taught me perseverance, not directly but indirectly … I think they motivate me quite a lot, yes, they have quite a large influence support-wise.

Interestingly, the male participants regarded their fathers (see participants A, D, F in Section 4.2.1) as well as their older brothers (see Section 4.2.1, participants D and F) as their role models, providing them with sound advice.

> P – D: My dad is very important, he always motivates me to give of my best in everything … His input is important to me, he regularly motivates me, he also shares my sense of humour, so I will say I am a little bit of my father's child, we are almost the same. If I have to do research, … I will ask my dad for help, because he has lots of experience in those areas.

> P – F: My brother, … he is my role model, and my father.

In contrast, in the cases where one or both parents seemed not to take an interest in supporting their child, such participants relied on their own intrinsic motivation and resilience to achieve academic success (see participants B and C in Section 4.2.1). Both these participants reported either no relationship or a conflicting relationship with their fathers.

According to Grantham and Ford (2003) and Kokot (2011), healthy peer relationships contribute to the general emotional adjustment of the adolescent. The subjects in this study, across both contextual backgrounds, highlighted the support they derived from a close group of friends who shared their values and

intellectual abilities. They partly ascribed their academic success to being part of a 'closed' group of 'like-minded' individuals and enjoyed belonging to these groups.

> P – F: I have one circle of friends with whom I spend each break … I do my school assignments with them … we're quite close.

They formed a support network to help one another which aided them in their academic success. As a unique group of academic achievers in both schools, they expressed their value and respect for one another, adding that they would not make fun of one another. Experiencing a sense of belonging to the group, they did not feel isolated and alone. One of the participants explained as follows:

> P- A: … I enjoy the conversation, the motivation we give each other, how we build each other up … but we will always support each other, we won't laugh at each other …

Outside these supportive friendship groups, however, their peers tended to be unkind and even cruel. They experienced inter-group tension, envy and ridicule, as well as being labelled or bullied because of their academic ability. This caused feelings of being different and in some instances resulted in loneliness and marginalization. The literature (Gross, 1998; Meece & Daniels, 2008; Jung *et al*., 2011; Kokot, 2011; Lee *et al*., 2012) confirms that such learners may be envied, resulting in them being ignored, feeling different, rejected or isolated. They find it difficult to develop and maintain friendships with same-age peers who do not have the same intellectual capacity as they do. Consequently, they tend to create a distance between themselves and their peers (Lomofsky & Skuy, 2001; Meece & Daniels, 2008; De Witt, 2009; Jung *et al*., 2011).

As mentioned above, academic success and the realization of gifted potential are dependent on the collaboration between the various proximal systems. Therefore a school environment which is supported by the family and peers may aid academic success (Freeman, 2000). The way the learner experiences support from school and views school may determine the fulfilment of innate potential. In support of this notion, the findings indicate that the school in the affluent area was mostly experienced positively and was seen as essential to their academic success (see Sections 4.2.1, participants A, D, E and F). However, the participants from the school in the low SES context did mention that their school was lagging behind in some subjects in comparison to schools in the affluent context.

> P – A: … that we had to take after-classes to catch up with work that we have not done … because there are instances where we fall behind other schools … that they have already done, so it makes it difficult … specifically for me, and that is what I would want to change, yes, Miss.

Another contributing factor, noted from the findings, which enhanced academic success in the school in the more affluent community, was the smaller classes. These participants made special mention of the fact that individual attention was valuable and only possible when classes were smaller.

> P – D: I just experience that in my class in particular I have always been fortunate, because I have never really been in a very large class, because I take English and Afrikaans first

> language, so I have always been in a small class where the teacher can focus more on each specific child …

The participants in the school in the less affluent community were not as fortunate and had mixed feelings regarding their school. This will receive further attention in Section 4.3.4.

The participants shared the same passion and interest in their subjects and all underscored Mathematics and Science as their favourite subjects. They agreed that positive relationships with their teachers could aid academic success.

> P – E: I enjoy school a lot at the moment because it's nice for me to have subjects that I chose and that I'm actually interested in … in each subject I was lucky to get the right teachers, so I enjoy it a lot because all my teachers know what they're doing and we work well together.

In contrast, those participants who seemed to experience less positive relationships with their teachers found these relationships distressing and challenging, which may have impeded their academic success and emotional well-being (see Section 4.2.1.2).

> P - B: For me, it is when our teachers reprimand our class, I have a bit of a temper, so I become rebellious and I don't want to work, and then I just sit, then I am sort of on a strike and then I don't work.

A further positive motivator for academic success, according to one participant from the affluent context, was the public fiscal rewards and certificates that the school presented to the top academic learners. This seemed to act as an extrinsic motivating factor.

Donald *et al.* (2010) and Swart and Pettipher (2011) propose that the external resources in the local community as well as the socio-economic status of the community may have an indirect influence on the development and academic success of the learner. The findings generated in this study indicated that the two diverse community settings did present opportunities to aid the participants' academic success. These opportunities, however, differed with regard to the needs of the two schools. The participants from the low SES community mentioned the collaboration between a nearby school and college to provide extra tuition for those who seemed interested in enhancing their learning process. One participant who resided in a farm community was unable to attend these classes, but mentioned that her community rated her academic achievement highly and encouraged her to continue in her efforts to be successful. Conversely, the participants from the affluent community did not mention the availability of any tuition classes in their broader community. They seemed not to be in need of particular support from their broader community, as they had all the resources they needed available at home. Consequently, they did not rely on the community to provide additional educational opportunities.

Despite access to public libraries, as Freeman (2000) suggests, for various different reasons the majority of participants did not make use of these facilities and did not attribute their academic success to the availability of this communal resource. As the literature indicates, individuals from higher SES families tend to have

more resources and materials available to them (Freeman, 2000). It seems that families who reside in more privileged social-economic contexts can provide better opportunities and access to the resources needed to aid and enhance the facilitation of gifted potential (Schoon, 2000). A possible explanation for participants in the more affluent community not using the public library may be the readily available internet at home, as well as technological advances which connect one immediately with a global field of resources beyond those of the somewhat limited book resources at a library. It may also be possible that the library resources are out-dated.

> P – E: I go to the internet … we have quite a lot of books at home … and such like, which I can also use, so, yes, I think I am privileged to have the sources available to me.

One participant in the low SES context had access to the library and attended it regularly, despite library regulations which limited effective access, as explained in Section 4.2.1.1. However, the other participants in the low SES community, while they had no computer or internet facilities in their homes, did have access to services offered by cellular phones to aid their learning, although on a more limited scale.

> P – B: Research ... the library is far from my home ... I'd rather look on my sister's phone ... Google or so on.

In conclusion, this section showed that being successful in realizing gifted potential requires the collaboration of active interactive systems of the inner and outer worlds of the individual, with the self's innate characteristics, family, peers and community, all playing their part. The realization of gifted potential cannot occur in isolation and challenges the "edu-myth" (Geake, 2009, p. 83) that this group of learners can make it on their own. A dearth of appropriate educational opportunities or of a supportive family and peers may result in underachievement and a lack of motivation (Subotnik *et al.*, 2011). However, a strong family and social environment, one that invests in a truly outstanding individual through collaborative partnerships, may contribute to the successful cultivation of gifted potential (Al-Shabatat *et al.* 2009).

4.3.3 Unique support needs

Gifted learners, in comparison to 'disabled' or 'disadvantaged' learners, as mentioned in Chapter one, have their own unique needs. Taylor and Kokot (2000) contend that these learners' needs have been overlooked and do not receive much attention either in education policy documents or in the implementation of these policies. The findings in this study identified various needs in the different proximal systems of the participants. These are discussed under the following categories: self, family, peers and community.

4.3.3.1 Self

The participants are all still in the adolescent developmental phase, a period of transition between childhood and adulthood. Different parts of the adolescent's brain mature at different rates (Wild & Swartz, 2012); because of this, gifted adolescents seem to present with more intense emotional experiences (Gross, 1998; Coleman & Cross, 2000; Sisk, 2008; De Witt, 2009; Kokot, 2011). They may be more susceptible to risk-taking behaviour and depression, as well as be more vulnerable to stress and emotional distress (Kokot, 1994, 2011; Gross, 1998; McCoach & Siegle, 2003). They may also present with uneven development,

which is reflected in their emotional behaviour and lack of sufficient social skills. It is important therefore to explore the participants' distinct intra-personal developmental needs. In support of the above notion, one participant hoped to be more mature and less volatile or temperamental, while another recognized a need to be more patient (see Sections 4.2.1.2 and 4.2.1.5). The heightened emotionality of the adolescent phase may be reflected in conflicting relationships with family members and peers (Hong, 1999; Sisk, 2008; Kokot, 2011; O'Connor, 2012; Shechtman & Silektor, 2012). One of the participants reported as follows:

> P – B: … sometimes I argue with my sisters … I am too volatile … My friendships usually don't work out … probably my volatility again.

The same participant reported on feelings of loneliness, depression and a lack of will (see Freeman, 2000).

> P – B: So alone, as if nobody understands me. I feel so much as if I am alone in the world, as if I don't belong anywhere … depressed or something. Because sometimes I am very friendly or I am always the one who laughs, but then I can change quickly into a devil if you say something about me … but I don't have – how can I say …? perseverance … then I get tired and then I leave everything … and then I just throw in the towel …

With regard to the conative domain, some of the participants in both contexts expressed a need to develop personal skills, to persevere and endure, as well as to develop intrinsic motivation. They further voiced a desire for a greater variety in their activities to stimulate them intellectually (see Kokot, 1994).

All the participants said that they were empathic, had a sense of altruism and were keenly aware of the needs of their environment. At times, this awareness can cause them stress and even distress, because they would like to be in a position to make a difference. Some are also aware of possible expectations, for example to make a contribution to solving the problems in society. This places a lot of responsibility on their shoulders that can at times be a heavy load to carry (see Terman, cited in Kokot, 1994, 2011; De Witt, 2009). However, in spite of their empathic awareness of the expectations others placed on them, four participants, representing both school contexts, seemed able to distinguish the non-essentials which could hinder their development; reflecting an affective stable nature, they were not in need of support in this area (refer to Section 4.2.1).

> P – B: If people suffer … I am actually very sensitive, then it feels as if I want to burst into tears … I don't want to look around me, because sometimes it is just too much … The people that throw their lives away …
>
> P – A: … to do something for others, like when I decided to shave all my hair for cancer sufferers … I didn't even worry about the opinions other people had of me, I didn't worry, I just did it.
>
> P – F: Relationships, I can read the situation that the person is in and have empathy with the person.

Despite most of the participants reporting positive, strong self-esteem and self-confidence, some did mention areas of their selves which were in need of development (Gross, 1998). Within the conative domain, a few

expressed the need for future guidance because of feelings of being different to the norm (Kokot, 1994). The feeling of insecurity about oneself and the fear of criticism could be linked to a lack of emotional maturity (see Section 4.2.1.1 and 4.2.1.3). One participant specifically reported a fear of failure:

> P – C: I am afraid of failing, I am afraid of failure, Miss, I just don't know, I am afraid that I will disappoint my parents … so that people cannot criticize me and so on …

Participants from both contexts felt that their positive self-concepts and emotional maturity allowed them to step out in their communities and make efforts to contribute to their environments. However, one participant, who seemed to be ridiculed and bullied by her peers, as well as experiencing negative attitudes from teachers, did at times doubt herself and was then tempted to abandon her own goals and standards.

> P – B: … so they will rather like me more if I achieve less. Most of the time I don't feel happy.

Therefore, as the findings indicate, certain aspects of the personalities of these gifted learners may still need to develop. These aspects may delay the full development of their innate potential. The findings concur with the literature which holds that to actualize innate potential calls for a positive self-concept and a healthy relationship with the self (Gross, 1998). Affective characteristics, such as emotional maturity and stability, a strong inner sense of self and the willingness to take risks, need to be present. In accepting her or his own self as being unique and different, the intellectually gifted adolescent may demonstrate the confidence and sense of security essential for the development of her/his full intellectual and academic capacity (Kline, 1991, cited in Kokot, 1994). As discussed in Section 2.6.5.2, a positive self-concept influences self-perceptions, which may determine the persistence required in challenging activities. Creating and providing a space where they are accepted for their uniqueness may foster their distinctive need for imaginative and creative self-expression (Kokot, 2011).

4.3.3.2 Family

The relationship between the adolescent and parents is one of the most important influences in a child's development. The interest of the parents in their child's academic development is therefore fundamental (De Witt, 2009). The relationships of gifted adolescents with their parents and siblings may however be marked by conflict and disputes. Two participants from the low SES schools hoped for less conflict and disputes with their parents. They did not seem to get the necessary support from their parents, because the parents either did not understand or were unaware of their children's specific educational needs. This finding supports the claim by Freeman (2000) that parents' level of education and socio-economic status may act as a barrier to the development of giftedness and may affect how familial support is rendered (see Section 4.3.2.2). From the data, it seemed as if affluent parents were more able to give their children the necessary support, in contrast to parents in the low SES context (see Section 4.2.1.2 and 4.2.1.3).

Two female participants in the low SES school reported that they did not have a good relationship with their fathers. Neither of their fathers showed any interest in their academic achievements, while one father also tended to criticize his child's academic performance and continuously expected more from her without giving

the necessary support (refer to Section 4.3.2.2). This finding echoes Freeman (2000) and Mudrak's (2011) arguments that gifted adolescents may be prone to pressure from parents to perform better. This may result in much distress for the gifted child. Both these participants expressed their desire for a better relationship with their fathers (refer to Sections 4.2.1.2 and 4.2.1.3). In contrast, the participants residing in the affluent community reported that both parents took an interest in their academic progress. In the case of the two boys, their fathers specifically acted as role-models, while their mothers also seemed to encourage them.

Perleth *et al*. (2000) and Freeman (2000) rightfully see parents who are sensitive and support their gifted adolescents' needs as being cognitive mediators who foster and facilitate the development of gifted potential, as supported by these findings. Those adolescents, who did not receive recognition, support, guidance or appreciation from their parents, in particular from their fathers, expressed their feeling that this to some extent impeded their affective and academic functioning. Those parents who did provide the necessary support enhanced their children's capacity to excel in their studies.

4.3.3.3 Peers

The participants in this study indicated that they were accepted by other gifted peers, but that they experienced envy, rejection and isolation from other peers outside their closed group of friends (refer to Section 4.3.2.2). This finding is supported by the literature (Meece & Daniels, 2008; Jung *et al.*, 2011; Lee *et al.,* 2012). The participants disliked these inter-group tensions and would have liked more acceptance, respect and support from their peers (see Section 4.2.1). This need for acceptance by their peers is confirmed in the literature, which found that gifted adolescents tend to value social interaction with their peers. When this does not occur, they may be left with feelings of frustration and of being socially incapable (Jung *et al*., 2011; Kokot, 2011; Lee *et al*., 2012). Peer acceptance and the development of secure and mature peer relationships may further aid adolescents' identity formation, giving them the means by which they can measure their own identity and growth (Gross, 1998). This need was specifically voiced by a female participant in the school in the low SES community. Certain female participants from both contexts also shared their experience of the academic competition that they disliked (see Sections 4.2.1.2 and 4.2.1.4).

> P – E: … there are always girls who are competitive and who always and then, oh, I hate it, I'm not competitive, I don't compare myself to others, … these are my abilities and what not, but there is always somebody … jealousy … I hate it … I get so tired of it … it's not nice, there are so many, so many who are underhand, but it's so sort of, it's so false actually … I don't like it.

One participant expressed her desire to be accepted by her peers, regardless of her different ethnic background. However, she exhibited, as literature echoes, the ability to display more mature interpersonal and "above average" social skills (Lee *et al.*, 2012, p. 91-92).

> P – C: … sometimes it's very difficult for me, because I'm at a Coloured school and I am a black girl, sometimes it makes me feel bad when they call me names and say bad things to me and so it hurts me, then I don't feel like learning in class and so on.

In conclusion, all adolescents, whether gifted or not, want to be accepted as part of a peer group. Building and establishing secure and mature relations with sympathetic and understanding peers may facilitate significant proximal processes with other individuals different from oneself. This acceptance from peers outside a 'closed' group of friends is an important aspect of facilitating identity formation and alleviating feelings of being different and therefore less acceptable.

4.3.3.4 Community

Xolo (2007) and Kokot (2011) argue that some communities, due to a failure to give recognition, resources or support, may handicap the development of those with gifted potential. Schoon (2000) concurs with Xolo and argues that individuals who live in disadvantaged conditions may be limited by their environments and are therefore at risk of not developing their full potential. This may result in them not realizing their potential and therefore they may "fall through the cracks" (refer to Section 4.3.2.5) (Subotnik *et al*., 2011, p. 8) and go unnoticed, as their environment does not sufficiently cater for their specific needs. They may be so used to accepting what they are given that they will not appropriately challenge the curricula to reveal their abilities or make demands according to their real needs (Subotnik *et al.*, 2011). Schoon (2000, p. 217) and Freeman (2000, p. 579) claim that, although a community's resources, where available, may influence the development of gifted potential, those who are gifted may in turn influence their environments by "demanding more learning activities" or better resources, as noted in the exposition of the case presentations, Section 4.2.1. Some of the participants who lived in extremely impoverished parts of the community had no access to a library, computer or internet facilities. They expressed their need for these facilities, especially as their home environments also lacked such resources. Indeed, all the participants in the low SES context voiced their desire for better facilities and community resources (refer to Section 4.3.2.5).

> P – B: Research ... the library is far from my home ... I rather look on my sister's phone ... Google or so on.

> P – B: … the library is a long way from my home … there are no computers at home … might have been better if I maybe had my own room … internet … bursaries …

The need for financial aid and possible bursaries for tertiary education was also voiced. However, despite the lack of resources and support from the community, they showed resilience, continuing to excel and making the best of any opportunities put at their disposal (see Sections 4.2.1.2 and 4.2.1.3). One participant in particular seemed to be breaking the negative cycle with her strongly positive take on life. This finding corresponds with Schoon's (2000) contention that gifted individuals have the ability to profit from whatever environment they find themselves in.

> P – C: I do not have access to a library … I use information that the teacher gives … I have a cellphone … then I Google … I don't even have a computer at home … that is why I write it myself at home.

4.3.4 Provision within the current inclusive education system

The environment and atmosphere of the school can play a key role in shaping and developing academic potential, as the school is one of the primary systems with which the learner interacts (Schoon, 2000; Oswald & De Villiers, 2013). As discussed in Section 2.6.5.1, the school environment includes the curriculum and the school facilities, as well as all the relationships related to the school context, such as with teachers, staff members and peers (Lens & Rand, 2000). As noted in Section 2.6.2.2, the onus is on the teachers to differentiate the curriculum in order to accommodate all learners with exceptional educational needs. Teachers are also expected to accept responsibility for improving their own skills and knowledge. They need to cultivate new skills to facilitate effective inclusive practices and to plan for diversity by implementing adequate differentiation strategies (Department of Education, 2001; Oswald & De Villiers, 2013). Against this backdrop, the following findings as reported by the participants will be discussed.

4.3.4.1 Curriculum

In support of the Education White Paper 6, the *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010, p. 6) identifies "the gifted learner as one category of exceptionality" and stipulates that learners from all levels of intellectual ability should be accommodated in the inclusive classroom. It further specifies that the curriculum should be differentiated and presented in such a way that all learners' needs are accommodated (Oswald & De Villiers, 2013). CAPS (Department of Basic Education, 2011), the new curriculum initiative, endorses the notion of inclusivity which requires teachers to plan for diversity by implementing various differentiation strategies. From the findings, it seems that the gap between policy development and what happens at grassroots level persists in South Africa. The existing literature in this field, while limited, indicates that inadequate educational support is given to gifted learners, as previously noted (see Section 2.6.2.2) (Lomofsky & Skuy, 2001; Van der Westhuizen & Maree, 2006; Wallace, 2007; Xolo, 2007; Kokot, 2011; Oswald & De Villiers, 2013). Van der Westhuizen and Maree (2006) argue that all gifted learners from all cultures and contexts should receive quality education, as stipulated by Education White Paper 6 (Department of Education, 2001), eventually enrolling for tertiary studies, facing post-modern societal challenges and making a contribution to the country.

From the biographical information of the participants it is evident that the learners from the affluent school are offered the opportunity to take extra subjects such as Xhosa and Additional Mathematics, which may ease the transition from the secondary school to tertiary education. This privilege is not afforded the learners in the less affluent school. Some participants from the affluent school voiced their concerns over the inadequate implementation of the policy on gifted education in the school system. One argued that, despite the new CAPS curriculum, not enough was being done with regard to curriculum differentiation for the gifted learner.

> P – D: … I just feel that the system in South Africa currently is horrible …

Another compared the curriculum with what happens internationally. He expressed his concern about the huge gap between secondary and tertiary education. He felt that the South African education system

compromised by lowering educational standards to fit the norm and lagged behind global advances; internationally, learners have to perform to set standards to be able to make the transition from school to university (see Sections 4.2.1.4 and 4.2.2.6).

> P – D: … the difference between matric and university is incredible in this country, it is terrible. Overseas they make that gap much smaller, because in our country they try to accommodate the children who do not want to learn and so on, so that they can also pass matric. Overseas they don't want to, overseas it is that child's problem … the large gap between school and university is just so ridiculous … so there are people who get 95 and 100 percent for a subject at school and then they get to university and they almost fail.

Although the *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010) stipulates that learners at all levels of intellectual ability should be accommodated in the inclusive classroom, it became evident from all the participants' comments (from both the schools) that this notion held few benefits for them. Four of the participants, two from each school, expressed the need for curriculum adjustment. They were concerned about learners who, due to a limited scope of subjects from which to choose, had to take subjects such as Science and Mathematics. They suggested a more flexible curriculum, one which included a broader scope of subjects from which to choose. At present, many learners seemed either unable to pass these subjects or simply not interested in them. They offered this suggestion as a possible solution to the negative atmosphere in classes dealing with certain subjects.

> P – D: In the class environment there is often like ten percent of the class maybe that is really not very intelligent, then they are often together in the class with the children who understand the work, and then the children who understand it must hear it explained maybe for the second time, sit and wait there for the teacher to explain it another four times to that student who puts up his hand 80 times for every little thing, and wait that he can understand it and it irritates me a lot.

> P – A: ... to have other subject choices ... or such a subject that many children will be interested in ... so that is something that I want to change, the fact that children should have other subject choices.

These learners tended to be disruptive in class and did not show the teachers the necessary respect. In contrast to the participants, they were not serious about their progress in school and tended to make fun of them (refer to Section 4.2.1, the passages on the relationship with the school).

> P – A: ... then you get some of them who want to push you down by, how can I say, making a joke ...

A suggestion was also presented by a participant for reinstating higher and standard/lower grades in subjects. He asked that old examination papers from the National examination be made available to learners to facilitate their learning progress. He also suggested that it would be a good practice for learners to be

allowed to see their own examination papers in order to learn from their own mistakes (refer to Section 4.2.1.6).

4.3.4.2 Teacher

As noted above, the onus is on the teachers to create an academic space where diverse learning abilities and needs are accommodated and to improve their own skills and knowledge in order to facilitate diverse learning needs and build learner confidence. Teachers are expected to facilitate, stimulate and challenge the curiosity of those learners with heightened abilities. Curriculum differentiation and enrichment in the mainstream classroom are necessary to accommodate the gifted learner in a meaningful way (Shaklee, 1997; Hutchinson & Martin, 1999). Curriculum differentiation does not mean equalizing education, but instead enhances the different learning styles and needs of all learners (Jewell, 2005; Van der Westhuizen & Maree, 2006) as laid down by the *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010). A recent study by Oswald and De Villiers (2013) found that South African teachers in primary schools rated themselves as inadequately trained to appropriately enrich and differentiate the curriculum for the gifted learner. However, research in high schools with this particular focus is limited.

From the data generated in this study, it became clear that the majority of teachers in the two high schools involved were not making any special efforts to accommodate the gifted learners. Very few teachers showed an awareness of their specific needs or provided the necessary support. Four participants, representing both contexts, indicated that most teachers lacked the ability to present their subjects in a creative and enthusiastic manner. They also lacked the authority or the ability to control disruptive learners in their classrooms (refer to Sections 4.2.1.1; 4.2.1.2; 4.2.1.4 and 4.2.1.5).

> P – D: … and the other thing is teachers in general … you get those teachers that you have in class who have no control over the children, and I just feel that teachers like that who have no control over their classes can't really teach, because you are going to learn nothing in that class because nobody is going to listen to you because everyone is focused on the children who take over the class.

Two participants (one from each school) did however mention that there were one or two teachers who made some effort to differentiate and present their subjects in a well-prepared, creative and enthusiastic way. The literature suggests that teachers who are well-prepared, enthusiastic and available to learners can create stimulating and challenging environments for learners considered gifted (De Witt, 2009; Kokot, 2011). As noted in Section 4.3.1 when teachers neglect to provide stimulation to gifted learners, they may lapse into underachievement and other behavioural problems. Lack of motivation or academic frustration may result in a negative learning trajectory (Gross, 1998; Oswald & De Villiers, 2013) as was noted in the case of one participant (see Sections 4.2.4 and 4.2.1.4).

This particular subject was an example of the gifted learner who is loath to work hard in school to realize his potential. According to him, he fell into a negative pattern of procrastination. He did not find schoolwork stimulating or challenging enough to entice him to give of his best. He also lacked interest in most of his

subjects, except Science and Mathematics, but even in these he did not put in the effort to work to his optimal level. This behavioural pattern echoes the literature which holds that when an individual has experienced a "long duration of underachievement", as in Jan's case, as well as lacking interest in his course, this could result in negative "habit formations or cognitive style" (Peterson & Colangelo, 1996, p. 404). This is often the case with male learners. According to Rayneri, Gerber and Wiley (2003, p. 202), these negative patterns associated with underachievement are related to "incompatible forces within the school environment" that seem to "mould their perceptions and attitudes". As Jan explained, he sometimes experienced negative and conflicting relations with some of his teachers, his wittiness was misunderstood by his peers, and he struggled to cope with "discomfiting psychological conflict in the classroom" and the school environment, which further reduced his interest in realizing his potential (Rayneri *et al*., 2003, p. 202). Fehrenbach (1993) concurs and explains that conflicting relationships and inadequate educational provisions may result in 'weak' academic skills and poor self-motivation. It is therefore essential that teachers make every effort to identify and consider the uniqueness of each learner and his or her learning style and abilities, to plan instructional strategies accordingly, and to ensure the provision of effective environments conducive to learning and the realization of potential.

The participants from the school in the low SES context also saw their school's academic provision and class stimulation as not offering them sufficient challenges to develop and enhance their unique abilities. They voiced a concern over some teachers' ineffectual and time-consuming teaching styles which left insufficient time to properly and thoroughly explain the work, leaving the learners frustrated. As gifted learners, they felt that little support was given to their unique learning styles; instead, the teachers focused on those learners who found the work challenging (refer to Section 4.2.1.1).

> P – A: If there is another thing that I would like to change, it is probably the way in which the subjects are offered … we have to write down the work until our books are full … last year we had to take extra classes … because the work became so much … because we had to do such a lot of writing … to catch up with the work … because there are many instances where we are behind other schools …

In contrast, one participant in the affluent community said that, due to the voluminous CAPS curriculum, some teachers rushed through the work at the expense of the academically slower learners. This caused him concern for their academic development and well-being (refer to Section 4.2.1.6).

According to the *Guidelines for Inclusive Teaching and Learning* (Department of Education, 2010), gifted learners may contribute to the joint learning experience of the other learners in class by sharing their particular strengths and interests (see Section 1.1). This did happen with all the participants, but to their detriment. They mentioned that they often had to help the other learners or explain work to them, at the cost of their own academic development. Often they lost focus and concentration (see Section 4.2.1, participants A, B, D and E). The literature suggests that gifted learners tend to become teachers' assistants, ending up helping the slower learners in class (Kokot, 2011). Two participants from each school confirmed this tendency.

In the school in the less affluent community, the overcrowded classrooms forced the gifted learners to become responsible for their own academic progress, as they could not rely on having additional support. They also expressed their frustration at having to wait for the slower learners to grasp the content of the academic work, which often led to boredom and to loss of interest in their own work. Another aspect which emerged from the data was that of teachers who humiliated intelligent learners in front of the class, a practice which is supported in the literature (Kokot, 2011). When learners are treated in this manner, they may withdraw, lower their academic standards, and abandon their academic goals and ideals (Kokot, 2011). A participant in the disadvantaged context shared her experience of teachers either making derogatory remarks about all the learners in class or specifically about those who achieved well academically. She found this behaviour both offensive and demotivating (refer to Section 4.2.1.2). A participant in the affluent school context concurred with the above comments, saying that the whole class was at times the target of degrading remarks from teachers, resulting in feelings of distress (refer to Section 4.2.1.5).

> P – E: … we hear I don't know how many times in a week, "You are the A class, you are supposed to be more intelligent than the rest, you are supposed to have manners, you are supposed to hand in your assignments on time."

All the participants mentioned the extreme pressure to which the teachers subjected them. This pressure caused anxiety and stress in the majority of the participants (refer to Sections 4.2.1.1; 4.2.1.4 and 4.2.1.5). One of them explained as follows:

> P – B: … everybody expects that I have to do my best … it's just that there is too much on me.

However, one participant claimed that she did not allow this pressure to act as a barrier to her academic progress. Instead, she used it to motivate her to do even better academically (see Section 4.2.1.3).

4.3.4.3 School facilities

As indicated above, the culture of a school does influence the learning progress of its learners. From the data, it became evident that the participants from the school in the previously disadvantaged community experienced a rather negative atmosphere at school which affected those who were eager to learn and to advance themselves (refer to Section 4.2.1.3).

> P – C: … there is no positive spirit at school … things are very confused, Miss.

A study conducted by De Villiers (2009) found that, due to the egalitarian and equalizing approach to education in South Africa, mainstream classrooms are often overcrowded and the teachers are overloaded with work, resulting in gifted learners being left with minimal attention in the classroom. In this study, it became evident that classes in the school in the low SES context were overcrowded. All three participants from this school complained about the situation and the detrimental effect it had on their learning (refer to Sections 4.2.1.1; 4.2.1.2 and 4.2.1.3). One of the three explained as follows:

> P – A: … they also waste our time, because the class is so full that sometimes there are periods that go by without us getting any teaching in that subject … because there is too much noise … it influences you as learner who maybe excels above the others and it brings you down …

As mentioned in Section 4.3.2.2, the learners in the more affluent school saw their smaller class as an asset. One of the participants in this school, however, was in a more crowded Accountancy class and felt the negative effect of having too many learners in one class. In this instance, the support was not adequate for all the learners (refer to Sections 4.2.1.4; 4.2.1.5 and 4.2.1.6).

> P – E: … have first language … small classes … only in one class in Accountancy where we are a big class and that is where I experienced all these other things, but luckily I don't experience it anywhere else.

As indicated in Section 4.3.3.3, the participants from both schools recorded the disruptive and disrespectful behaviour of other learners in their classes as detrimental to their learning process. They wanted this to be addressed, as the other learners' lack of cooperation in class acted as a barrier to their own learning, making it difficult to focus on the work (refer to Section 4.2.1).

Three participants, from both contexts, wanted classes to be divided according to the learners' intellectual abilities and aptitudes. They argued that this would aid them in studying together at an advanced rate, instead of being held back by irresponsible or playful behaviour.

> P – D: I definitely feel the school system must be divided in classes according to their ability to learn and their intelligence, because it is really, it is terrible to me when it is like that and children keep back the others, the more intelligent kids, so I think it is just important to put them in classes according to how intelligent you are and how good your learning ability is and so on.

Although some participants agreed with this suggestion, they were also aware of the challenges involved in such an arrangement. They admitted that there could be a risk of over-pressurizing the gifted learners while neglecting the less able ones, as well as giving a greater workload to the teachers.

> P – E: I think it is a good idea that the children are separated, but if you look at the other side of it then there will be this one small group that excels above the others … somewhere along the line, this other class will fall behind …

One participant in particular felt strongly about not dividing classes according to ability. He suggested that diverse learning abilities and needs should be accommodated by curriculum differentiation and other curriculum enrichment strategies (refer to Section 4.2.1.6).

According to the literature, overcrowded classes and overloaded teachers result in gifted learners not receiving the necessary support. The teachers themselves may also lack the skills, knowledge and understanding of gifted learners needed to adequately assist them (Xolo, 2007; De Villiers, 2009; Kokot,

2011). The findings from this study support this notion. Two participants, one from each school, mentioned the lack of adequate teaching, guidance and support in their subjects:

> P – B: I don't feel that my school supports me, I don't know why, but I feel I don't get that necessary support from them …
>
> P – F: … the needs are definitely not sufficiently addressed in the new curriculum … that is what they are changing now … the new curriculum might be a step in the right direction, I don't know whether it's at the finish line yet but it is moving.

One participant from the low SES context specifically voiced her need for the school to support and motivate her, the better to utilize her potential. She suggested that, while the school seemed to take pride in them and benefit from their academic achievements, it was not prepared to offer the necessary support (refer to Section 4.2.1.2).

> P – B: You might get your pat on the back, you did well, but you don't get more than that, absolutely nothing.

In spite of their intellectual abilities, gifted learners do require support from their teachers (Tomlinson, 2001; Manning *et al.,* 2010; Kokot, 2011). It has been found that gifted learners who are not adequately supported, stimulated and challenged may develop negative attitudes towards school, as was noted in the case of the participant described above (see Sections 4.3.3.2 and 4.2.1.4). They may also be subject to an "imposter syndrome" (Manning *et al.,* 2010) resulting from their being gifted, curious and highly intellectual but not offered adequate academic challenges and stimulation. Collaboration with other educational institutions and opportunities facilitated by the school are other essential aspects which may foster the development of gifted potential. Findings from this study indicated that neither of the two schools had any library facilities. Both schools did however provide access to computer and internet facilities. According to participants from the low SES context, however, these facilities were limited in their school. They mentioned a lack of quality learning opportunities, although their school did expose them to opportunities made available at universities (refer to Sections 4.2.1.1; 4.2.1.2 and 4.2.1.3).

In contrast, the participants in the affluent school maintained that their school did offer sufficient computer and internet facilities, but that they themselves did not make use of these. Their school also exposed them to opportunities made available at universities, but to a lesser extent.

Papierno *et al.* (2005) considered that the relationship between the gifted individual's innate ability and the environment could either enhance or stunt the development and realization of potential. It became evident from the findings that some of the participants in both contexts experienced a mismatch between their learning needs and their respective environments. This apparent mismatch seemed to have an effect on the learning progress of some of the participants, while others appeared to have more support from their families and also a greater ability or sense of emotional intelligence, so they were less influenced by the challenges arising from their environments. Finally, despite policy recommendations to accommodate and facilitate

gifted learners in their unique needs, either through curriculum differentiation or enrichment, it remains a challenging issue in schools.

4.4 CONCLUSION

In this chapter, the data collected from the six participants was presented in two stages in order to answer the overarching research question and sub-questions posed in Chapter one. Firstly, a within-case analysis of each individual case was presented in a descriptive narrative format. To gain an in-depth understanding of each participant's life-world and lived experience of being gifted in an inclusive classroom, the data was analysed according to the central themes. I identified these while referring to the structure provided by Bronfenbrenner's bio-ecological model, which served as the theoretical framework of this study. Secondly, an exposition of the cross-case analysis of the data findings was presented. Data were cross-compared across the individual cases in order to build abstractions from across these cases. The similarities and differences that cut across the cases were established by identifying recurring themes and categories across the cases. This was done to gain a holistic perspective and insight into the data, from which findings were derived, interpreted and discussed.

Chapter five will offer concluding remarks and recommendations with regard to the lived experiences of gifted learners in an inclusive school system. The strengths and the limitations of the research study will also be discussed.

CHAPTER FIVE

CONCLUDING REMARKS, RECOMMENDATIONS, LIMITATIONS AND STRENGTHS

5.1 INTRODUCTION

This research study explored the lived experiences of adolescents in Grade 11 who were considered academically gifted. I wanted to gain insight into their experiences of being gifted, as played out in the various systems impacting on their lives, namely the school, their parents, their peer groups and the broader community. I further explored the support needs of these learners, in an inclusive education system, in order to suggest changes contributing towards quality education for this particular group of learners.

I used a qualitative case study design founded on an interpretive research paradigm to investigate the following questions on the lived experiences of the gifted Grade 11 learners in the current education system: how their various systems and proximal processes contributed to their success, what their specific needs were, and whether they were sufficiently provided for in the current inclusive education system in South Africa. Using a collective instrumental case study design, I allowed the voices of these academically gifted learners to narrate their experiences, joys, specific needs and frustrations.

The extant literature in the South African context highlights a gap between policy initiatives and their implementation in the mainstream classroom. Gifted learners therefore seem to be at the rear end of the queue for educational provision. My findings showed that inclusivity was not practiced as required by policy and that these learners faced challenges in the mainstream classroom. Gifted learners needed support and enriched learning opportunities in their respective classes as was currently not the case.

My research gave me an insight into the participants' meaning-making processes, allowing me an in-depth understanding in the challenges they faced, as well as their support and educational needs. My findings answered both the main research question and the sub-questions. I confirmed that gifted learners are being neglected in the mainstream classroom. South Africa, it appeared, was in dire need of rethinking gifted education and the way in which all learners with unique needs were being accommodated.

In this chapter, I present concluding remarks on the main research findings, as well as recommendations to support and enhance efficient gifted education. The limitations and strengths of the study will also be discussed and possible future research will be suggested.

5.2 CONCLUDING DISCUSSION ON FINDINGS

This research on the lived experiences of six gifted Grade 11 learners was conducted in a rural area in the Western Cape Province. The participants attended two schools, one in an affluent area the other in a low socio-economic area in a rural town. The six participants' experiences across these two different contexts

largely corresponded, but subtle differences also emerged. The following conclusions were drawn from the findings presented and discussed in Chapter four.

Giftedness is a phenomenon inherent in the individual. It is an innate biological, genetic, inheritable ability. The participants from both contexts viewed their own giftedness as an innate ability, but one which was mostly masked and not recognized by the majority of people. It is evident that giftedness mainly goes unrecognized by most people, including in the education system. However, as an innate ability, it is of key importance. It should not be viewed only as a social construct, generated by the social discourse in a specific socio-historical time and political context. In this view, it has often been seen as belonging to the Apartheid regime in South Africa and as being a 'white élitist' practice.

Giftedness is an inherent ability which can reside in individuals from across different cultures and contexts. It calls for the attention of all role-players implicated in nurturing it to its full realization. An education system which cuts across various socio-political and cultural contexts has a responsibility not only to recognize and accommodate these individuals but also to seriously consider catering for their learning abilities and needs. Thus while giftedness can be viewed as an innate ability, the system plays an important role in addressing the unique needs of gifted children (Ziegler & Phillipson, 2012). The responsibility for nurturing their intellectual capital rests with all the various systemic levels involved.

The rural town where the research was conducted is still divided into two separate socio-economic areas, a legacy of the former Apartheid government. These comprise an affluent area and a disadvantaged socio-economic community, each represented by a research school. The majority of participants from both schools highlighted the important role that the school environment, teachers, peers and parents played in realizing their academic success.

However, a series of complementary factors need to come together to make academic success a possibility. These include the individual's distinct innate characteristics (as confirmed by all the participants from both contexts), a nurturing home environment, qualified and well-prepared teachers and schools, excellent learning conditions both in and out of school, and educational policies which support these learners. As noted in Chapter four, the data generated in the two diverse contexts showed that giftedness is not limited to a certain context (affluent or disadvantaged) or to ethnicity. It is not confined to any particular socio-economic context or race, but instead extends beyond these boundaries. It also became evident that gifted learners from both these diverse contexts and cultures do face various challenges in the education system, as well as have specific needs regarding the various systems and proximal processes impacting on the development of their potential. Thus it is imperative to consider their unique needs and provide for these through differentiated teaching strategies and enrichment education programs.

Findings from both schools showed that parents who had tertiary education backgrounds were very supportive of their children's specific needs. All the participants emphasized the value of parental interest, guidance, encouragement and appreciation. However, the educational and socio-economic status as well as cultural background of the family did enhance parental interest and involvement. At the other extreme, some

fathers from the low SES context did not take an interest in their children's academic career or offer the necessary support.

The research findings underscored, as French, Walker and Shore (2011, p. 145) suggest, that gifted learners prefer to work on their own or with "true peers", those they recognize as other gifted learners, rather than working with other, `ungifted' learners. This was apparent in both schools, as all the participants belonged to a 'closed' intimate group of academic achievers. They preferred to socialize and network with the members of these groups. They gained a sense of identity, 'sameness' and belonging in their groups, which reduced feelings of rejection, isolation, or of not being the norm. Bullying from non-gifted peers left them with a sense of being alienated from those outside their 'closed' groups. From the findings, it seems that these learners are vulnerable to peer-ridicule and discord, despite having appropriate emotional and social skills. The participants across both the contexts voiced their need for peer acceptance and their fear of being ridiculed, envied or labelled.

From the above, it can be concluded that relationships within the various proximal systems do have a direct impact on the psychological and affective well-being of gifted learners, and can be pivotal to the realization of exceptional ability. Parental interest and support for their specific needs, as well as peer acceptance, are factors which need to be considered in enhancing and fostering gifted potential.

It is evident from the data that healthy relationships with teachers encourage the development of gifted potential and academic achievement. However, misunderstandings and lack of insight into the gifted individual's specific needs can jeopardize positive learning experiences. This results in feelings of negativity and hostility, particularly evident in the participants in the low SES context. The findings indicated that all the subjects across both contexts were to some degree neglected and were co-opted as teachers' 'assistants', at the cost of their own development. Teachers from both schools, but predominantly from the low SES school, also seemed not to be appropriately trained or informed on how to differentiate the curriculum for these learners. In the majority of cases, while being pressured to excel, the learners were not given meaningful support. Some were also the target of derogatory remarks, which increased the difficulties they had to face daily. It is therefore of the utmost importance to address these challenges, particularly when they affect the realization of the learners' potential.

My findings further indicated that it is imperative to provide enriched and challenging learning opportunities for such children, and that they should enjoy the necessary attention from all the systems involved. Additionally, the findings dispelled the "edu-myth" (Geake, 2009, p. 83) that learners who are gifted can facilitate their own learning and develop their own potential (Coleman & Cross, 2002). These learners are not necessarily capable of making it on their own in the classroom and "will [not] reach their full potential without any specialized programs or assistance" (Hardman *et al.*, 2005, p. 514). On the other hand, the data does show that the participants in this study manifested 'force characteristics' (Tudge *et al.*, 2009; Swart & Pettipher, 2011), showing an innate drive and perseverance which helped them to excel, despite adverse circumstances.

This was especially evident in the school in the less affluent community. Participants there displayed remarkable resilience, and were clearly determined to "maintain high levels of academic performance" despite their negative life experiences and lack of support (Peterson, Duncan & Canady, 2009, p. 44). These learners did well academically and ended top in their class, but the question remains what the effect of a more nurturing and challenging school environment would have been on their academic progress. Despite opportunities offered to take extra subjects such as Additional Mathematics and Xhosa in the more affluent school, the detrimental effect of less than ideal learning circumstances was also evident. The detrimental effect was however to a lesser extent than in the other school, where the learners were frustrated because of their limiting school environment as they were, among others, not offered the opportunity to take extra subjects. As Subotnik *et al.* (2011) contend, regardless of the conditions under which they attend school, gifted learners seem not to be an educational priority due to an apparent assumption that they 'can make it' under any conditions, whether neglected or being provided for.

My research therefore supports Kokot's (2011, p. 32) suggestion that the "myth about gifted children being able to excel without attention from their teachers should once and for all be dispelled." Environments which facilitate learning play a key role in the development of exceptional ability and high achievement. They affect how these individuals develop, physically, cognitively and emotionally (Wild & Swartz, 2012; Ziegler & Phillipson, 2012).

The participants from both schools suggested certain curriculum adaptations which could answer to their needs. They wanted a broader scope of subjects from which to choose, ensuring that they would be able to study subjects in which they were really interested. This would mean smaller classes for those who were able to master more complex subjects, such as Science, Mathematics and Accountancy. Interestingly, they never referred to separate schools for the gifted, but wanted their own schools to change to accommodate the needs of all the learners, in line with the principles of inclusive education as envisaged for South Africa.

Certain participants suggested dividing classes according to intellectual abilities. They felt this would address the dilemma of their being held back by slower learners. In the light of the above, I would recommend an enriched curriculum for these learners in the classroom (Tomlinson-Keasey, 1990; Winner, 2000; Geake, 2009). To ensure meaningful opportunities for all learners, schools should adapt their systems in line with policy recommendations to accommodate the unique needs of each individual, including each gifted individual (Kokot, 2011). This should be done in schools across all contexts to address the abilities and needs of all gifted learners. The following quote taken from the work of Subotnik *et al*. (2011) clearly sums this up:

> "A democracy, more than any other system, requires an abundant supply and wide diffusion of talent and leadership if it is to survive and prosper … Greater attention to the educational needs of the ablest students is an effective way to improve education for all young people. The typical experience of a school or college that sets out to provide better opportunities for its ablest students is to discover far more submerged ability than was suspected and to up-grade the tone and performance of the entire institution" (p. 9).

As a researcher, I agree with Xolo's (2007) claim that the literature says very little about giftedness in developing countries. In the light of my findings, I would conclude that it is pivotal to review the position of these learners in the current education system. Freeman (2002) maintains that South Africa urgently needs to reconsider how all learners with unique needs are to be accommodated, given that optimizing their abilities seems to have been neglected. This statement echoes with the findings of this study. In the provision of quality education for gifted learners, there is a gap between policy initiatives and how these initiatives are realized at ground level.

I found that classroom practices across both contexts did not effectively cater to these learners' specific needs, confirming the gap between policy specifications and classroom implementation. The Grade 11 learners' accounts of their experiences reflected a failure to include gifted learners in the agenda of the education authorities in the Western Cape (Oswald & De Villiers, 2013, p. 1). They also recorded their concern that educational standards were being lowered to accommodate all levels of abilities, leaving learners less prepared for the transition from secondary to tertiary education.

Given that gifted learners from the rural area targeted by this research study did not receive adequate support in the mainstream classroom, I would suggest that it is now time for the education system to make a concerted effort to train and support teachers to provide for such learners. Curriculum differentiation and appropriately designed gifted education are needed to accommodate these learners in mainstream classrooms and to facilitate the realization of their potential. In support of Oswald and De Villiers (2013), I would suggest the establishment of collaborative partnerships between all the relevant role-players involved with these learners as one possible answer to the challenge. This echoes Xolo (2007) and Maree's opinions (Wallace, 2007) that all professional and official role-players, as well as the broader community, should be held accountable and responsible for addressing challenges and concerns relating to the needs of gifted learners and their education.

5.3 RECOMMENDATIONS

This study highlighted the specific needs of gifted Grade 11 learners at all systemic levels. It examined the gap between educational policy to support gifted learners and its implementation at grassroots level. It further revealed the potential neglect of these learners in the mainstream classroom, and the various challenges and frustrations they face at all systemic levels. Recommendations at each level are made in the following sections.

5.3.1 New initiatives and policy change

If the relevant role-players from the macro- to the micro-level, that is, from government level down to the learners' parents and families, fail to recognize the frustrations and need for support of these learners or change their perceptions and attitudes regarding gifted education, no true change will occur. A renewed focus on the needs of these learners in the education system is of the utmost importance. While we can learn much from the international arena, South Africa still faces its own unique educational challenges, given the diversity of the different groups of learners in the country.

- **Addressing policy concerns**

Current education policy in South Africa is designed to promote moral and social values, a culture of lifelong learning, the ability to think critically, and to understand abstract ideas. It sets out to enhance problem-solving skills and to raise citizens who can effectively participate and contribute to a democratic society (Van der Horst, 2000). However, it appears that these policy initiatives are not making the hoped-for inroads in schools and classrooms. Founded on an equalizing theory of current education, in practice this policy seems to jeopardize the aforementioned values and ideals, putting gifted education in South Africa at risk (Kokot, cited in Wallace, 2007~~, p. 196~~).

Policy-makers need to rethink their perspectives on equalizing educational opportunities for all learners, and in particular reframe their perspectives on giftedness and gifted education (Van der Westhuizen & Maree, 2006), providing for the specific needs of gifted learners. A further perception which needs to be addressed is that the academic standard of schooling is compromised to accommodate learners who struggle in school. If this is the case, it is done at the cost of the country's intellectual capital, a cost which no country can afford. It is not the work-load of the learners that needs to be increased, but rather the level at which they are challenged, as is argued by some of the participants themselves.

- **Developing new gifted education initiatives**

Clearly the time is right for the development of new models on giftedness and gifted education, ones relevant to the South African context. These programs should build on the strengths of the African culture, as suggested by Taylor and Kokot (2000), to increase their relevancy in the country's multicultural context. They should inform policy decision-making and formulation to address the diverse needs of multi-potentiality, with specific reference to learners with exceptional abilities in the mainstream classroom.

Facilitating and nurturing potential to its full realization does not depend on policy implementation alone, but is a collaborative effort involving contributions from all the systemic levels. It is therefore necessary to explore how the various systems can aid gifted children in their learning. The community and fiscal resources, in particular, are essential elements in facilitating gifted education.

5.3.2 Community contributions

Conferences and workshops on giftedness, as well as on specific subject fields of interest, could be presented to facilitate collaborative partnerships. These would include all role players, community members, teachers, parents, and the learners themselves. Private companies could be approached for sponsorships and bursaries enabling these learners to pursue tertiary education. The private sector could facilitate training initiatives outside the school arena in various fields to stimulate higher or meta-cognitive functioning. These training schemes could further be employed to challenge and motivate gifted learners to actively engage in studying real-life socio-political and economic difficulties at all systemic levels. They could foster intellectual capacity by drawing on gifted learners' 'expert', novel or original contributions to these real-life dilemmas. In this way, the community, the school, parents and gifted learners could take collective actions, allowing such

learners to take "leadership positions in the development of their own communities" (Xolo, 2007, p. 206), using their innovations to improve their own communities.

In line with this, communities and all relevant role-players could initiate other intervention programs, including vacation schools (Xolo, 2007), where gifted learners from different backgrounds and schools within a specific community could work together on social-political problems. This could help develop greater creative abilities in one unified, collective capacity. Gifted learners could be challenged and stimulated to find ground-breaking solutions, avoiding conventional or traditional ways of doing things. Communities could draw on these learners' intellectual assets, at the same time creating a platform from which they could 'experiment' using their unique skills and 'expertise'. These recursive opportunities could benefit both the community and the learners themselves.

Universities are key institutions, playing a fundamental role in the training of teachers, presenting new research findings which can not only inform policy initiatives and decision-making but also generate novel classroom practices, including designing gifted education programs relevant to diverse contemporary contexts.

5.3.3 A school environment conducive to realizing gifted potential

A school environment which is conducive to facilitating learning and realizing potential can serve as an incubator that may foster gifted ability and nurture it to its full capacity. The training of teachers, developing their teaching skills, strategies and classroom practices, class sizes and the curriculum are all aspects to be considered when creating the ideal environment to facilitate gifted potential. Recommendations in these areas are discussed below.

- **Teacher training and teaching strategies**

As both the literature and the data generated from this study have highlighted, adequate teacher training in the field of giftedness, especially in the South African context, is urgently needed. Attention should be given to the quality of teacher training, both pre-service and in-service, since not all teachers are trained to fulfil all the various learning needs in South African classrooms (Oswald & De Villiers, 2013). Training programs at tertiary level should be adapted to ensure that gifted education becomes part of the training modules. Teachers should be given the knowledge and skills to facilitate problem-solving, showing learners how to think independently and critically, encouraging them to use creative, innovative reasoning skills, rather than merely reproducing information.

Renzulli's *Enrichment Triad* (Van der Horst, 2000), as presented in Chapter two, Section 2.6.5.1, offers valuable ways of implementing problem-solving activities for gifted learners. These encourage them to move beyond the limitations of mere reproductive thought processes, instead confronting the challenges of innovative, creative problem-solving, focusing in particular on the kind of twenty-first century dilemmas faced by an intricate multi-cultural society such as South Africa.

In addition, all teachers should be trained on how to identify gifted learners in their classrooms. This is a controversial and contentious terrain, so their training should include specific measures to aid them in the

identification process. They should also be educated about multiculturalism and diverse learning styles, the better to aid gifted learners. In this manner, teachers could "serve as conduits to gifted and talented programs" (Van der Westhuizen & Maree, 2006, p. 208).

For those teachers who had their training some years ago, more in-depth courses may be needed to update their skills. Compulsory workshops on teaching strategies to differentiate and enrich the curriculum, specifically focused on gifted education, could be presented. Aspects to be considered could include criteria for identifying gifted individuals, their unique characteristics and natures, their learning styles and preferences, as well as their emotional support needs. Such insights could equip and empower the teachers who work with them. International and national experts in the field of giftedness could also be approached to provide relevant new information as obtained through contemporary research.

Teachers should stay abreast of innovations and the literature on their subjects, to ensure that they stay imaginative and flexible in their teaching methods and strategies. In the classroom, they should encourage abstract, creative and critical thinking in gifted learners. They will need to differentiate the existing curriculum not by only giving gifted learners greater quantities of work and facts to memorize and reproduce, but should also encourage independent learning and initiate the "reading of high-level and original texts" (Woolfolk, 2013, p. 159). They should try not to feel threatened by these learners' capabilities and challenging questions, but should be tolerant and understanding of their uniqueness (Woolfolk, 2013).

Following Sternberg (2012), I propose that teachers should also be aware of how they can encourage and reward academic high achievers and not be biased or prejudiced. They should be sensitive and at all times take an 'open-minded' approach to each individual in their classrooms, avoiding stereotyping behaviour or defining academic achievement according to their own beliefs or preferences. In this manner they will be able to meet each learner at his or her unique point of need, as well as encouraging innovative ability and contributions.

- **Classroom practices**

Cooperative learning practices in the mainstream classroom can be complex and are often not without problems. The question arises whether gifted learners should be placed in mixed-ability groups or grouped with their high-ability peers. Implementing the first case could aid gifted learners in developing the social and affective skills needed to interact with other peers, but could also frustrate and demotivate their learning and progress, stunting their development, while the second approach could cause an imbalance in the development of their social interactive skills. The literature suggests that gifted learners tend to learn and work better when in groups with other high-ability peers, as reflected in the findings in this study (Woolfolk, 2013). When placed in mixed-ability groups for projects, they may end up doing the work of the other learners and may feel misused, and not stimulated or challenged. This avenue also opens up the possibility for contention and strife among their less academically inclined peers.

Gifted learners should therefore not only be grouped with those of mixed abilities in cooperative learning but should also be grouped with others like themselves, according to their intellectual abilities and similar

aptitudes. This will help them to avoid boredom and counter the feeling of being held back by other peers (Woolfolk, 2013). Some participants in this study agreed with grouping according to high abilities, but were also concerned to balance this with the cooperative learning gained from being involved in group activities. Cooperative learning remains problematic, but nevertheless has definite benefits which should not be ignored.

Gifted enrichment programs and various teaching and learning strategies, such as Bloom's *Taxonomy of Cognitive Objectives* (see Chapter 2, Section 2.6.5.1), could be integrated into regular classroom teaching, not only to benefit the gifted but also to afford all learners the opportunity "participate in and gain from enrichment and extension" (Taylor & Kokot, 2000, p. 813). All the learners would thus be enabled to explore and develop their own potential. This would also ensure that no discrimination against any learner took place. All those interested in developing their potential would benefit from such an opportunity.

- **Class sizes**

A further area which needs attention is that of the size of the classes, and the ratio of learners to teachers, especially in the more disadvantaged communities. Class sizes should be smaller, enabling teachers to support learners in more meaningful ways (Oswald & De Villiers, 2013). This however, remains quandary in the current education system.

- **Curriculum**

Curricula need to be adapted to make a greater variety of subject choices available, as suggested by all the participants in both contexts. However, given the lack of fiscal resources in the education system, this could be problematic for schools in rural areas, as each school is awarded an educational quota according to the percentage of learners they house. Nevertheless, the Department of Basic Education should consider curriculum adaptation and offer a wider variety of subject choices, to ensure that all learners' needs and different interests at all academic levels are be addressed and accommodated.

A further aspect that was suggested and could be considered is reinstating the teaching of subjects at both higher and lower grades. This would address the differences in intellectual and academic ability without discriminating against those learners who were academically less able. Gifted learners would feel less frustrated or restricted in their own development, while the less gifted would not be challenged above their own abilities.

5.3.4 Proximal processes

Peer interactions and acceptance, parental involvement and the understanding of one's own ability and nature could facilitate optimal potential development. Possible recommendations concerning these aspects are given below.

- **Peer interactions and intra-personal skills**

Professionals such as educational psychologists and school counsellors could be approached to present workshops at which the whole spectrum of learners could gain understanding and insight into their unique

and distinct characteristics, personalities and needs. The concept of difference, which is an important aspect of every society, could be explored, to mediate peer interactions as well as to give learners a better understanding, acceptance and appreciation of each other's uniqueness. This could enhance the quality of social interactions among peers, as well as foster the development of all learners in their individual and unique needs.

- **Informing family and parents**

Psycho-educational workshops could also be set up to help parents and families build collaborative partnerships and foster whole-school development, taking in the broad spectrum of diverse learners. These workshops could help parents to understand their children's unique abilities and diverse needs, and teach them how to give their children academic support at home. This would encourage them to motivate their children, becoming partners in developing and realizing their potential. They could also collaborate both with teachers and with one another in giving support where needed. A culture of understanding, acceptance and inclusivity of diversity in the schools could thus be created across the diverse population.

Establishing parent-support groups in communities could be a further way of supporting families, not only of gifted learners but of the whole school population. These would offer a safe space where parents could share their specific concerns as well as their successes. They could draw on the experiences of other families and learn from one another. During these sessions, experts on various aspects of diversity and special needs, including giftedness and gifted education, could give parents relevant and appropriate advice, as well as sharing new knowledge and findings.

Collaborative actions on the part of all role-players could be another way to address the neglect of gifted learners in the mainstream classroom. Such collaborative partnerships could foster and enhance the realization and development of their gifted potential (Gibbons, Pelchar & Cochran, 2012). No man is an island: no one can fully develop and realize his or her own potential in isolation.

5.4 LIMITATIONS OF THE STUDY

There were a number of limitations to this study. Firstly, the scientific verification of the identification procedures of the participants was problematic. No reliable psychometric assessment measures could be found to identify the gifted learners. This was a result of South Africa's complex multicultural society and the limited means of identification. Psychometric measures have to be used with great sensitivity and caution in a multicultural context, as these tools are not standardized to the norms representing all the cultures in South Africa, causing them to be culture-biased rather than culture-free.

Sattler (2002) points out there is no single system that is best for identifying gifted learners. Procedures should be put in place to ensure the identification and recognition of such individuals. The process should preferably involve a holistic approach (De Villiers, 2009). Alternative means of assessment, such as viewing participants' academic trajectories or observing their behaviour (Gibbons *et al*., 2012) over a period of time, as well as the kind of selection criteria used in a study, could increase the efficiency of identification. In view of the "mammoth problem" (Taylor & Kokot, 2000, p. 808) of identification of the gifted, this study relied

heavily on the teachers' knowledge of their learners to identify those who were considered academically gifted. A checklist adapted from Sousa (2009) with specific identification criteria was used to assist the teachers in identifying such learners (see Chapter 1, Section 1.6.3, Table 1.1).

A second apparent limitation in the selection procedure was the bias of the teachers and their stereotyped view of giftedness. To reduce and limit this bias, I gave the teachers relevant literature and explained about these learners' unique and distinct characteristics. Nevertheless, the possibility remains that not all the participants could truly be regarded as gifted, but instead could present simply as of superior intellectual ability. Research on appropriate identification measures in a multicultural context is therefore needed to address this vacuum.

Thirdly, the scope of this study was fairly narrow, since it was designed as a collective instrumental case study type. According to Flyvberg (2011), a case study cannot give reliable information about the broader context or about other individuals' experiences, and the final conclusions cannot therefore be generalized to the broader population.

Fourthly, although my research focused on the lived experiences of academically gifted Grade 11 learners and their support needs in an inclusive classroom, the data collection methods used to gain insight into their meaning-making processes could have been enhanced by using additional methods. Observation and the examination of academic work portfolios and other relevant documents could have been useful in collecting more 'objective' data about classroom practices, methods and situations.

Finally, the scope of the study was limited by the sample size focussing on gifted Grade 11 learners (FET band) in a 'closed' rural area. As mentioned before the sample was not representative of the full spectrum of gifted students, nor of the general population of high school learners. Small sample size comes at the cost of transferability of the findings. Qualitative research studies are often characterized by small sample size, so the widening of the sample would help to increase the transferability of the research findings. Opening up the study into different contexts, such as semi-rural and urban contexts, would also increase the transferability of the findings. Learners in the broader urban areas, as well as those in the GET band, could benefit from similar research into their experiences of being academically gifted and to identify their specific needs. It could further be used to identify the needs of learners of other domains of giftedness at all school levels. Unfortunately, this lay outside the scope of the current study.

5.5 STRENGTHS OF THE STUDY

Due to the nature and structure of the research design, I gained a rich, in-depth insight into the perceptions and experiences of academically gifted Grade 11 learners from diverse cultures and in diverse contexts. I came to understand the challenges they faced and their frustrations when their support needs were not met. My study gave the participants a chance to narrate their experiences. At the conclusion of the research, they voiced their appreciation and their sense of being valued. They felt encouraged to remain focused and to maintain their academic goals, despite the many challenges they faced. They were given hope for future educational adaptations and for other 'like-minded' gifted learners to follow in their footsteps. Their

participation in the study left them with a sense of significance, as they had contributed to a field in dire need of attention. For me, these insights into their experiences were significant as they provided important information which could be used to direct policy formulation and secure support from the Department of Education.

My investigation was conducted across two diverse contexts, but yielded data which corresponded across the boundaries of the settings, lending substance to the findings and strengthening their reliability and validity. I see this as one of the strengths of the study. The findings could give all the relevant role-players, from teachers and parents to the larger communities and the Department of Basic Education, the opportunity to reflect on this group of learners' specific needs and determine what could be done to fulfil these needs. The strengths and weaknesses in these proximal processes should no longer be ignored, but should be identified and addressed. All these learners should be able to realize their potential as part of a true democratic society, in which every unique individual is "given the fullest opportunity to develop to the limit of his (her) mental capacity" (Terman, cited in Kokot, 2011, p. 510).

5.6 THE RELEVANCE OF THE STUDY

This research revealed that gifted learners in mainstream schools are in dire need of quality education. From the data, it seems as if South Africa is neglecting its intellectual capital. In the literature on giftedness in the African context (see Chapter 2, Section 2.6.2.1), a shift has been noted in the perception of giftedness in African countries. The *African Gifted Foundation* was founded in collaboration with leading African universities. Drawing on African expertise and research on gifted education, the Foundation has become a catalyst for gifted education across Africa. It has established a benchmark for gifted education and taken the lead in delivering high quality gifted educational opportunities to young people in Africa (African Gifted Foundation, 2010). I believe it is important that the National Department should be made aware of the initiatives of the Foundation, to ensure that our education system does not lag behind current developments in Africa (see Chapter 2, Section 2.6.2.1). This study could therefore add to this larger discourse both in Africa and South Africa.

My findings concur with those of Taylor and Kokot (2000), Van der Westhuizen and Maree (2006), Xolo (2007), De Villiers (2009) and Kokot (2011), who found that insufficient provision is made to accommodate these learners in mainstream classes, as teachers lack the training, skills, experience, or knowledge needed to help them reach their full potential. Facilities are also conspicuously lacking in these schools.

In conclusion, this study reinforces the urgent need to heed the voices of the participants and to address the gaps in the current inclusive education system.

5.7 FURTHER POSSIBLE RESEARCH RECOMMENDATIONS

Dai, Swanson and Cheng (2011) claim that international research on giftedness has seen rapid growth in the past few decades. Sternberg (2012), however, maintains that such research has shown only limited progress and change over recent years. Sternberg (2012, p. 207) attributes this to the "dogmatism of gifted education".

Research is restricted or limited in its development, because of the strictness or inflexibility in which gifted education is conceptualized. Particular forces influence how new research in the field is interpreted, understood and explained. These include a narrow conception of giftedness, and a bias towards defining it as an analytical ability rather than any other kind of skill, as well as the replication of what has already been taught and the continued use of traditional testing measures. All these have had a significant influence on how research is conducted and have led to stagnation in the study of gifted education (Sternberg, 2012, pp. 209-212). This dogmatic approach restricts the development of new, contemporary perspectives, causing research in gifted education to continue in traditional perspectives.

These are compounded by real-world practices, the availability of budgets, and the movement for accountability. Not only is research in gifted education inhibited by restricted budgets, it is also restrained by having to be accountable to the needs of the majority. A further limiting factor is the tunnel vision over identification procedures, which seem to be limited to traditional psychometric assessment measures. In addition, policy initiatives tend to focus on students who have difficulties and are marginalized, which in turn may leave schools with "little incentive to pay attention to gifted students" (Sternberg, 2012, p. 209).

Sternberg (2012) suggests that research in gifted education is constrained because it can only move at the pace the "education marketplace" (Sternberg, 2012, p. 209). Change in the field of gifted education therefore seems to be determined by what takes place in schools. Such change tends to be initiated by policy initiatives, reformation and adjustments. Thus if policy initiatives are carried out and educational advances take place in in schools, change in gifted education may be considered and eventually realized. However, if "things regress in schools, the field of gifted education can regress too" (Sternberg, 2012, p. 209). This seems to be the case as reflected in the findings of this research. According to the literature, the conventional ways of implementing gifted programs are being dismantled (Wallace, 2007) and seem no longer to be relevant to the multi-cultural South African context.

Further research could also be carried out on how policy initiatives are formulated and implemented. How these may either constrain or allow the development of gifted education in mainstream schools should also be researched, explored and reported on. In addition, research initiatives should be undertaken to investigate how the education marketplace could accommodate the needs of gifted learners. Given the findings in this study, I agree with Maree and Van der Westhuizen (2009, p. 14) in stressing the importance of extending the "existing body of knowledge in gifted education to better understand giftedness in the context of a third world" developing country.

Another contentious terrain which needs attention is the 'limited' and unreliable conventional procedures used to identify giftedness. I concur with Ziegler *et al.* (2012, p. 195) that future researchers should strive to design new methods which are not simply "selection-oriented", targeting individuals. Research should aim to create "learning pathways (to eminence)" in order to make identification more reliable and justifiable (Ziegler *et al.*, 2012, p. 195). At present, certain populations and cultures are under-represented in the field of giftedness and gifted education (Shaklee, 1997; Dai *et al.*, 2011). I suggest that it is essential to conduct

research on how diverse populations and cultures in South Africa perceive, understand and identify giftedness, as well as defining their specific educational needs.

The way giftedness is interpreted depends on the values and worldviews of each culture. In accord with Hernandez de Hahn (2000), I suggest that researchers should address the design of effective services and intervention strategies which address the needs of culturally diverse students and ultimately aid in their retention in gifted programs throughout the world. It is important to recognize that time and space often determine the gifts and talents which any given society nurtures, as well as the way it chooses to identify gifted individuals.

Research on how giftedness is understood and constructed in a multicultural context could inspire new and appropriate identification strategies, helping teachers and other relevant role-players in South Africa to identify gifted learners. The importance of further research on the impact cultural differences and disadvantaged conditions has on giftedness and gifted education cannot be over-emphasized. Such research, if focused on the country's different ethnic groups, could inform and direct both the Department of Basic Education and the government on the need to attend to gifted learners. A minority group in terms of numbers, their intellectual capital could nevertheless make critical contributions to the benefit of society, as well as making them accountable, responsible citizens and possible future leaders.

In addition, I would suggest comparative studies exploring the differences and similarities in perceptions of giftedness and gifted education in different cultures internationally. These could help to combat the narrow perceptions which have become "stuck" due to the dogmatism of gifted education (Sternberg, 2012, p. 210). From this perspective, multiple approaches could be yielded, which, as Van Tassel-Baka (cited in Sternberg, 2012) suggests, could aid us in challenging our own out-dated assumptions, dogmatic views or beliefs. A willingness to engage with and synthesize new models as well as being open to new ideas could generate innovations and initiatives relevant to the modern world.

Research is fundamental in any given field. Taking account of contemporary changes and trends, it explores and maps both the known and the unknown in any specific scientific field (retrieved online: http:www.ebabbie.net/resource/practice/04/purposes.html). It is a tool by which advances can be made to empower those who have been disregarded, marginalized or neglected.

Pioneering work is needed to develop new models and educational programmes in gifted education, taking into account how such education is perceived and understood in the South African context. Hitherto, it has been politicized and regarded as controversial and contentious (Wright, 2008), while the field of research on giftedness has been described as "fractured, contested, porous rather than unified" (Dai *et al.*, 2011, p. 127). Nevertheless, the need for research in this field cannot be ignored.

Continued research on these themes may inform the South African Department of Basic Education on the specific needs of gifted learners and guide fundamental policy and decision-making. It could draw attention to the neglect of the gifted in the education system, which at present seems mainly to be focused on those with disabilities (Van der Westhuizen & Maree, 2006; Kokot, 2011).

5.8 CONCLUDING REFLECTIONS

Before conducting this investigation, I was aware that the potential of gifted children, despite existing policy initiatives, was not being nurtured by society. In my experience, these learners were often left to cope on their own. I became increasingly aware of this while teaching learners who seemed themselves totally unaware of their own abilities. This raised my concern even further and increased my interest in and passion for this field. In the course of my research, I became even more aware of and sensitive to the changes which needed to take place at grassroots level to meet the unique and specific needs of gifted learners in line with policy initiatives.

The more I gained insight into and understanding of these learners' lived experiences, the more I realized the valuable contribution they could make to society. I believed that these learners' voices needed to be heard and brought to the attention of all those who could play a significant part in realizing their full potential.

Politically and educationally, South Africa has advanced beyond the former regime into a new democracy, where equality and equity are valued. It is important that we listen to the voices of gifted learners across all cultural groups and socio-economic contexts, despite their being a minority group in the education system. I agree with Shaklee (1997) that an education system which is ill-prepared to challenge its most capable learners may leave them unmotivated, frustrated and bored. Without adequate stimulation, they may present with behavioural challenges in class. Care should be taken to ensure that society does not lose out on their potential contributions (Oswald & De Villiers, 2013). As Strydom (1991) urged, if we as a nation are to survive future challenges, we need to nurture, explore and develop the hidden potential in these 'gifted treasures', together with that of the total school population. These learners could contribute to a new generation of highly professional, competent thinkers and problem-solvers. However, for this to happen, both they and their communities need to be supported in coming to terms with the demands of the twenty-first century (Van der Horst, 2000). Echoing Xolo (2007, p. 206), I want to conclude with the thought that "[i]t is not the gold in the mines, but the talents and the minds of our gifted youth which will make our country an effective participant in the global playing field."

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APPENDIX A

RESEARCH APPROVAL LETTER AND STIPULATIONS FROM THE RESEARCH ETHICS COMMITTEE: HUMAN RESEARCH (HUMANITIES)

UNIVERSITEIT·STELLENBOSCH·UNIVERSITY
jou kennisvennoot • your knowledge partner

Approved with Stipulations
Response to Modifications- (New Application)

23-Jan-2013
Rabie, Erika H
Stellenbosch, WC

Protocol #: HS879/2012
Title: The lived experiences of grade 11 learners considered academically gifted

Dear Ms Erika Rabie,

The **Response to Modifications -** ***(New Application)*** received on **14-Jan-2013**, was reviewed by members of **Research Ethics Committee: Human Research (Humanities)** via Expedited review procedures on **21-Jan-2013**.

Please note the following information about your approved research protocol:

Protocol Approval Period: **21-Jan-2013 -20-Jan-2014**

The Stipulations of your ethics approval are as follows:
1)Informed Consent form institutional:
"The REC appreciates the effort that the researcher has made in securing the signatures and stamps of the two schools. However, as per the REC protocol and standard operating procedures, the researcher is cordially requested to submit to the REC secretariat the officially signed letters from the two schools, instead of having a stamped and signed informed consent forms".
The institutional permission in this format does not mean that informed consent from individual participants is no longer necessary.
2)The REC notes that, in response to the question asked about the voluntariness of participation, the researcher states, inter alia, that "The teachers will be informed about the aims of the study and will be requested to manage their contribution in the study with great sensitivity and confidentiality to ensure the privacy and anonymity of the participating learners." Given the already stated pre-existing power relations, the REC cordially reminds the researcher that, to ensure voluntariness of participation and minimization of subtle coercion, the teachers involved in participant identification and recruitment emphasize in their verbal communication with prospective participants that participation is completely voluntary and that participants may decline invitation to partake in the study. Moreover, the teachers, together with the researcher would need to help participants, especially given that they are recruited from a limited pool of students, identify avenues and procedures of opting out of the study if they wish to do so, even if they had initially agreed to participate in the study.
3)POINT ADDRESSED SATISFACTORILY.
4)POINT ADDRESSED SATISFACTORILY.
5)The questions raised in the original REC feedback (Points/Scenarios A and B) pertained to what the researcher intended to do in the eventuality that information pertaining to each of the two scenarios ever came to her attention and knowledge. Given the burden on researchers to conduct ethically responsible research, and putting contingency plans in place in the event of adverse circumstances, the REC is not convinced that the two issues have been addressed satisfactorily, and invites the researcher to reflect on the course of action (i.e. the nature of the contingency plans she has in place) in the eventuality of the two scenarios highlighted in A and B.

6)POINT ADDRESSED, though the language used could still be simplified.
7)ALL ISSUES HAVE BEEN ADDRESSED.
8)ISSUE ADDRESSED.
9)The REC gets the sense that the researcher might have misconstrued the directive that "Schedule for Focus groups interviews must be submitted." What this requires of the researcher is in fact that she furnish the REC with the list of ENVISAGED/EXPECTED questions or themes that will form part of the focus-group interviews. The only schedule that has been submitted is the one for individual interviews (which gave the list of envisaged questions to be asked during the individual interviews). The researcher is still cordially requested to furnish the REC with the schedule for the focus group interviews.
10) ISSUE ADDRESSED.

Standard provisions
1. The researcher will remain within the procedures and protocols indicated in the proposal, particularly in terms of any undertakings made in terms of the confidentiality of the information gathered.
2. The research will again be submitted for ethical clearance if there is any substantial departure from the existing proposal.
3. The researcher will remain within the parameters of any applicable national legislation, institutional guidelines and scientific standards relevant to the specific field

of research.
4. The researcher will consider and implement the foregoing suggestions to lower the ethical risk associated with the research.

You may commence with your research with strict adherence to the abovementioned provisions and stipulations.

Please remember to use your **protocol number** (**HS879/2012**) on any documents or correspondence with the REC concerning your research protocol.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

After Ethical Review:
Please note that a progress report should be submitted to the Committee before the approval period has expired if a continuation is required.
The Committee will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

National Health Research Ethics Committee (NHREC) number REC-050411-032.

This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

Provincial and City of Cape Town Approval

Please note that for research at a primary or secondary healthcare facility permission must be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Contact persons are Ms Claudette Abrahams at Western Cape Department of Health (healthres@pgwc.gov.za Tel: +27 21 483 9907) and Dr Helene Visser at City Health (Helene.Visser@capetown.gov.za Tel: +27 21 400 3981).
Research that will be conducted at any tertiary academic institution requires approval from the relevant parties. For approvals from the Western Cape Education Department, contact Dr AT Wyngaard (awyngaar@pgwc.gov.za, Tel: 0214769272, Fax: 0865902282, http://wced.wcape.gov.za).

Institutional permission from academic institutions for students, staff & alumni. This institutional permission should be obtained before submitting an application for ethics clearance to the REC.
Please note that informed consent from participants can only be obtained after ethics approval has been granted. It is your responsibility as researcher to keep signed informed consent forms for inspection for the duration of the research.

We wish you the best as you conduct your research.
If you have any questions or need further help, please contact the REC office at 0218089183.

Included Documents:
Consent forms
Assent form
Research proposal
REC application
DESC Application
DESC Decision
REC Signatures
DESC Signatures
Interview Schedule
permission letter
Consent form Biedebach

Sincerely,

Susara Oberholzer
REC Coordinator
Research Ethics Committee: Human Research (Humanities)

Investigator Responsibilities

Protection of Human Research Participants

Some of the responsibilities investigators have when conducting research involving human participants are listed below:

1.Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2.Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use. If you need to recruit more participants than was noted in your REC approval letter, you must submit an amendment requesting an increase in the number of participants.

3.Informed Consent. You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4.Continuing Review. The REC must review and approve all REC-approved research protocols at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period.** Prior to the date on which the REC approval of the research expires, **it is your responsibility to submit the continuing review report in a timely fashion to ensure a lapse in REC approval does not occur.** If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5.Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, number of participants, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You **may not initiate** any amendments or changes to your research without first obtaining written REC review and approval. The **only exception** is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6.Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouch within **five (5) days** of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch Universtiy Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7.Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research protocol and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC

8.Reports to Sponsor. When you submit the required reports to your sponsor, you **must** provide a copy of that report to the REC. You may submit the report at the time of continuing REC review.

9.Provision of Counselling or emergency support. When a dedicated counsellor or phsychologis provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

10.Final reports. When you have completed (no further participant enrollment, interactions, interventions or data analysis) or stopped work on your research, you must submit a Final Report to the REC.

11.On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.

APPENDIX B

RESEARCH APPROVAL LETTER FROM WESTERN CAPE EDUCATION DEPARTMENT

Directorate: Research

Audrey.wyngaard2@pgwc.gov.za
tel: +27 021 467 9272
Fax: 0865902282
Private Bag x9114, Cape Town, 8000
wced.wcape.gov.za

REFERENCE: 20121025-0024
ENQUIRIES: Dr A T Wyngaard

Mrs Erika Rabie
Buffelskraal-wes
De Doorns
6875

Dear Mrs Erika Rabie

RESEARCH PROPOSAL: THE LIVED EXPERIENCES OF GRADE 11 LEARNERS CONSIDERED ACADEMICALLY GIFTED

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Approval for projects should be conveyed to the District Director of the schools where the project will be conducted.
5. Educators' programmes are not to be interrupted.
6. The Study is to be conducted from **01 February 2013 till 30 June 2013**
7. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
8. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
9. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
10. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
11. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
12. The Department receives a copy of the completed report/dissertation/thesis addressed to:

    The Director: Research Services
    Western Cape Education Department
    Private Bag X9114
    CAPE TOWN
    8000

We wish you success in your research.

Kind regards.
Signed: Dr Audrey T Wyngaard
for: **HEAD: EDUCATION**
DATE: 25 October 2012

APPENDIX C

RESEARCH APPROVAL AND CONSENT LETTER FROM THE PRINCIPAL OF THE AFFLUENT SCHOOL

TO WHOM IT MAY CONCERN

M.Ed Research Study: "The lived experiences of grade 11 learners considered academically gifted"

As the principal of the affluent High School in XXXXX, I gladly give Mrs. Erika Henrihet Rabie, a master's student from the Department of Educational Psychology at Stellenbosch University, permission to conduct the above-mentioned research investigation at the High School during the period 1 February to 30 June 2013. The following procedures as explained to me by the researcher will be supported:

- The researcher will be allowed to meet with relevant educators at the school in order to explain the selection criteria regarding the possible participants.
- The researcher will obtain permission from the parents of the participants before they meet with the learners.
- The researcher will be permitted to meet with the selected learners to explain the research procedures and what will be expected of them.
- The researcher will be permitted to schedule interviews with the participating learners after school hours on the school premises (if possible).

I do understand that any information that is obtained in connection with this study and that can be identified with the school or participants will remain confidential. I also understand that the identities of the participating learners will be safeguarded and that data gathered at the school will be released to the supervisor assigned to the study, Dr M. Oswald at the Department of Educational Psychology, Stellenbosch University. I am also aware that the individual interviews and focus group discussions will be audio-taped (verbatim) with the permission of the participants.

Yours sincerely
---XXXXXX--------
(Name of the principal)

---XXXXXXX- --29/01/2013----
Signed: The principal Date

(Stamp of the school)

APPENDIX D

RESEARCH APPROVAL AND CONSENT LETTER FROM THE PRINCIPAL OF THE LESS AFFLUENT SCHOOL

TO WHOM IT MAY CONCERN

MEd Research Study: "The lived experiences of grade 11 learners considered academically gifted"

As the principal of low SES Secondary School in XXXXX, I gladly give Mrs. Erika Henrihet Rabie, a master's student from the Department of Educational Psychology at Stellenbosch University, permission to conduct the above-mentioned research investigation at the Secondary School during the period 1 February to 30 June 2013.

The following procedures as explained to me by the researcher will be supported:

- The researcher will be allowed to meet with relevant educators at the school in order to explain the selection criteria regarding the possible participants.
- The researcher will obtain permission from the parents of the participants before they meet with the learners.
- The researcher will be permitted to meet with the selected learners to explain the research procedures and what will be expected of them.
- The researcher will be permitted to schedule interviews with the participating learners after school hours on the school premises (if possible).

I do understand that any information that is obtained in connection with this study and that can be identified with the school or participants will remain confidential. I also understand that the identities of the participating learners will be safeguarded and that data gathered at the school will be released to the supervisor assigned to the study, Dr M. Oswald at the Department of Educational Psychology, Stellenbosch University. I am also aware that the individual interviews and focus group discussions will be audio-taped (verbatim) with the permission of the participants.

Yours sincerely
---XXXX----------
(Name of the principal)

----XXXX--------- ---29/01/2013-----
Signed: The principal Date

(Stamp of the school)

APPENDIX E

PARENTAL CONSENT FOR CHILD TO PARTICIPATE IN RESEARCH

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY
jou kennisvennoot • your knowledge partner

STELLENBOSCH UNIVERSITY

PARENTAL CONSENT FOR CHILD TO PARTICIPATE IN RESEARCH

Date:

Dear Parent/Guardian

The lived experiences of grade 11 learners considered academically gifted

Your child has been selected to participate in a research study conducted by Erika Henrihet Rabie (BA. B.Ed Psych Hons), from the Department of Educational Psychology at Stellenbosch University. The results of the study will contribute to the completion of a Master's thesis. In a collaborative process with teachers at your child's school and by means of certain selection criteria for the identification of the academically gifted, your child has been identified as a potential participant in my study. Your child is therefore invited to be a voluntary participant in the aforementioned research study. The research will be conducted during the first semester of 2013.

1. PURPOSE OF THE STUDY

Academically giftedness is currently under-researched in South Africa. The purpose of this study is therefore to explore your child's experiences of being academically gifted. With this study I want to give your child the opportunity to voice his or her own experiences, assets and support needs with regard to learning

2. PROCEDURES

In a collaborative process and by means of selection criteria with teachers at your child's school, your child has been identified as a potential participant in my study. Your child is therefore invited to be a voluntary participant in the aforementioned research study. Should you give your consent as well as your child voluntarily assent to participate in this study, we would ask him/her to do the following things:

- Allow your child to participate in an individual interview of approximately 60 minutes conducted after school hours on the school premises.
- Allow the researcher to schedule a combined focus group interview at a central point convenient to all the participants as they will be expected to participate in a focus group after data collected by means of the individual interviews has been analysed.

3. POTENTIAL RISKS AND DISCOMFORTS

In the possible occurrence of your child as a participant or the researcher falling ill or being unavailable to attend an interview, the appointment will be re-scheduled at a time convenient to both parties.

No discomfort will be caused to you as a parent, your child or the school at any time. The individual interviews will be scheduled for after hours or at a time convenient to the school and participant. The researcher ensures that your child's education programme will not be interrupted.

The researcher will do everything in her power to not violate your child's rights and ensure his or her well-being.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Potential benefits may include greater self-awareness and self-knowledge. This study aims to allow your child as a participant the opportunity to voice their experiences that may result in insights to the benefit of the community, school, educators, the parents as well as the participants.

5. PAYMENT FOR PARTICIPATION

This study is a non-profitable study and therefore the participants will not receive any payment or remuneration.

6. CONFIDENTIALITY

The identification of your child as participant in this study will be kept confidential by all parties involved at all times. Your child's participation in the study will not be made known to any other individual apart from you as his/her parents/guardians, the co-participants, the relevant teachers, as well as the researcher

Any information that is obtained in connection with this study and that can be identified with the school or participants will remain confidential and will be disclosed only as required by law. Confidentiality will be maintained by means of using pseudonyms and assigning a code to the school and all relevant participants. The school or your child's participation in the study will therefore not be identified and your child's identity will remain anonymous. All data gathered will be safeguarded in a safe of which only I, Erika Henrihet Rabie, have the key. Electronic data will be saved on a password-protected personal computer of which only I, Erika Henrihet Rabie, will have access.

Data gathered will be released to the supervisor assigned to the study, Dr M. Oswald at the Department of Educational Psychology, Stellenbosch University. The individual interview with your child and focus group discussions will be audio-taped (verbatim) with the permission of your child as a participant. Your child as a participant will obtain the right to review the tapes as well as have access to the edited and transcribed materials. The tapes and transcribed material will be used for the purpose of completing the aforementioned Master's Thesis and will then be erased and destroyed. The findings may also be published in scientific journals and may potentially be presented at conferences. Anonymity with regard to the school and all relevant participants (your child included) will be ensured at all time.

7. PARTICIPATION AND WITHDRAWAL

Your child can voluntarily choose to be in the study. If your child volunteers to be in the study, he or she may withdraw at any time without consequences of any kind. The researcher will at all times try to ensure that no discomfort or breaching of confidentiality will occur.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact Erika Henrihet Rabie [erikarabie@buffelskraal.co.za; 082 496 3726] the principal investigator or Dr M.M. Oswald [mmoswald@sun.ac.za; 021 – 808 2037] the supervisor assigned to the study.

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent for your child to participate at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your child's participation in this research study. If you have questions regarding your child's rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development, Stellenbosch University.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE

The information above was described to me, Mr _____ and Ms _____ by Erika Henrihet Rabie in Afrikaans/English and I am in command of this language or it was satisfactorily translated to me. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent that my child may participate in this study; I have been given a copy of this form.

_____

Name of Subject/Participant

_____

Name of Legal Representative (if applicable)

_____ _____

Signature of Subject/Participant or Legal Representative **Date**

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [*name of the subject/participant]* and/or [his/her] representative _____ [*name of the representative]*. *[H*e/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in Afrikaans.

_____ _____

Signature of Investigator **Date**

APPENDIX F

PARTICIPANT INFORMATION LEAFLET AND ASSENT FORM

STELLENBOSCH UNIVERSITY

TITLE OF THE RESEARCH PROJECT:

The lived experiences of grade 11 learners considered academically gifted

RESEARCHERS NAME(S): Mrs Erika Rabie

ADDRESS: Buffelskraal-wes Farm
De Doorns
6875

CONTACT NUMBER: cell nr. 082 496 3726
Home tel nr. 023 356 2874

What is RESEARCH?

Research is something we do to find new knowledge about the way things (and people) work. Educational research, in particular, is interested in using research to understand, support and improve the learning of all learners and to improve teaching.

What is this research project all about?

Academically giftedness is currently under-researched in South Africa. With this study I want to give you the opportunity to voice your own experiences, assets and support needs with regard to learning.

Why have I been invited to take part in this research project?

You were identified as a possible participant in collaboration with teachers by means of certain selection criteria. Therefore you have been asked to participate in this study. Your participation will be highly appreciated.

Who is doing the research?

I, Erika Henrihet Rabie (BA. B.Ed Psych Hons), from the Department of Educational Psychology at Stellenbosch University, is a masters student in educational psychology. Your school was identified as a possible research site for this study. The results of the study will contribute to the completion of my Master's thesis.

What will happen to me in this study?

- You will be asked to participate in an individual interview of approximately 60 minutes conducted after school hours on the school premises.
- The researcher will also schedule and conduct a combined focus group interview at a central point convenient to all the participants. This focus group will include learners from your own school and three other learners from a school in the wear vicinity. The focus group interview will be conducted after all the individual interviews have been completed.

Can anything bad happen to me?

No discomfort will be caused to you, your parents or the school at any time. The individual interviews will be scheduled for after hours or at a time convenient to the school and participant. The researcher ensures that your education programme will not be interrupted.

The researcher will do everything in her power to not violate your rights and ensure your well-being and that you will benefit from your participation.

In the possible occurrence that you as a participant or the researcher may fall ill or be unavailable to attend an interview, the appointment will be re-scheduled at a time convenient to both parties.

Can anything good happen to me?

Potential benefits may include greater self-awareness and self-knowledge. This study aims to allow you as the participant the opportunity to voice your experiences that may result in insights to the benefit of the community, school, educators, your parents as well as yourself and your peers.

Will anyone know I am in the study?

Any information that is obtained in connection with this study and that can be identified with the school or you as a participant will remain confidential and will be made known only as required by law. Confidentiality will be maintained by means of using pseudonyms or assigning a code to the school and you as a participant. The school or any individuals participating in the study will therefore not be identified and their identities will remain anonymous. Your participation in the study will not be made known to any other individual apart from your parents, the co-participants, the relevant teachers as well as the researcher.

All data gathered will be safeguarded in a safe of which only I, Erika Henrihet Rabie, have the key. Electronic data will be saved on a password-protected personal computer of which only I, Erika Henrihet Rabie, will have access.

Data gathered will be released to the supervisor assigned to the study, Dr M.M. Oswald at the Department of Educational Psychology, Stellenbosch University. The individual interviews and focus group discussions will be audio-taped (verbatim) with the permission of you, as the participants. You as a participant will obtain the right to review the tapes as well as have access to the edited and transcribed materials. These tapes and transcribed materials will be used for the purpose of completing the aforementioned Master's Thesis and will then be erased and destroyed. The findings may also be published in scientific journals or presented at conferences. Anonymity with regard to the school and you as a participant will be ensured at all time.

Who can I talk to about the study?
If you have any questions or concerns about the research, please feel free to contact

- Erika Henrihet Rabie at [erikarabie@buffelskraal.co.za; 082 496 3726] the principal investigator

Or

- Dr M. Oswald [mmoswald@sun.ac.za; 021 – 808 2037] the supervisor assigned to the study.

Or

- If you have questions regarding your rights as a research subject, contact

- Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development, Stellenbosch University.

- Services of an educational psychologist:

Mr. K. Stevens (PS 0069019) Tel nr. 023 3484669

What if I do not want to do this?

You may voluntary choose to participate in the study. If you volunteer to be in the study, you may withdraw at any time without consequences of any kind. The researcher will at all-time try to ensure that no discomfort or breaching of confidentiality will occur.

Do you understand this research study and are you willing to take part in it?

YES	NO

Has the researcher answered all your questions?

YES	NO

Do you understand that you can pull out of the study at any time?

YES	NO

_____ _____

Signature of Learner Date

APPENDIX G

INTERVIEW SCHEDULE FOR INDIVIDUAL INTERVIEWS

Title: The lived experiences of grade 11 learners considered academically gifted

A. Demographic information

- Name: Surname:
- Pseudonym:
- Age: Gender:
- Culture:
- Language: Home: Instruction:

B. Interview Questions

1. Tell me about your collage.

2. What do you enjoy about life?
   Possible probes: hobbies and interests, sport, cultural activities, life in general, friendships

3. What would you regard as your particular strengths?

4. How do you experience school?

5. Who and what support you in your learning process?
   Possible probes: factors intrinsic to the self, teachers, school, peers, parents, siblings, community resources.

6. Tell me about things that need to change to ensure greater progress in your learning process.

7. Are there other areas in your life where you do need assistance?

8. Tell me about your social interactions with your peers.

APPENDIX H

FOCUS GROUP INTERVIEW QUESTIONS

1. How do you understand the concept 'giftedness'?
2. What encourages you to stay motivated in school?

   Possible probes: at home, for tests and exams, learning style?
3. Tell me about how you prefer to study (your study habits).
4. How does the school support and contribute to your learning process?
5. What challenges do you experience at school that may affect your academic success negatively?
6. What situations do you experience as stressful? Please tell me about these situations.
7. Are there things that need to change to ensure greater progress in your learning process?
8. Are there other areas in your life where you do need assistance?
9. How do you experience your peers at school?
10. Would you say that you sometimes feel different than your peers and other people? Please elaborate**.** How do you choose to spend your free-time?
11. Which role does spirituality (religion) play in your life?
12. Is there anything that you would like to add or contribute that we have not attended to?

APPENDIX I

PORTION OF THE TRANSCRIPTION FROM THE INDIVIDUAL INTERVIEW – CODING: THEMES AND CATEGORIES

Timothy

Title: The lived experiences of grade 11 learners considered academically gifted

C. Biographical information

- Name: Participant A Surname:
- Pseudonym: Timothy
- Age: 16 jaar Gender: Manlik
- Culture: Kleurling
- Language: Afrikaans Home: Afrikaans Instruction: Afrikaans

Coding	Categories	Themes
4. How do you experience school?		
Erika Nou wil ek by jou weet hoe ervaar jy skool?		
Timothy Ek ervaar dit as iets waarmee ek nie sonder kan lewe nie. Ek sien elke dag uit daarna, elke dag sien ek uit om my vriende te sien om my klasmaats te sien, ek kan nie wag nie. Ek borsel elke dag my skoolskoene, ek sorg dat alles reg is vir die volgende dag ek sorg dat alles gedoen is vir die volgende dag, ek beskou skool as 'n werk vir my as iets wat ek wil moet doen, partykeer sien ek kinders wat daar buite loop dan sien ek hulle was in dieselfde klas as waarin ek was en kyk waar is hulle nou en dit is as gevolg dat hulle nie gedink het skool sou goed vir hulle gewees het nie oor dit sou lekker wees nie en dis lekker vir my, dit is goed vir my want ek weet ek kan ver daarmee kom, ek weet dat dit 'n deel van my lewe het.	Outer-World (school and peers) Inner-World (distinct chatacteristics)	Support factors for academic success
Erika Wat van skool is vir jou lekker?	Inner-World (personality, distinct abilities)	
Timothy Wat van skool is vir my lekker?		
Erika Ja wat?	Outer-World (curriculum, subjects)	
Timothy Ek dink dit sou wees die vakke.		

Erika	Die vakke?		
Timothy	Spesifieke vakke juffrou		
Erika	Vertel vir my van dit?		
Timothy	As ek elke dag uit moet sien na skool dan sal ek dink aan wat ons in daardie spesifieke vak gedoen het, as ek miskien nou dink- as dit nou môre skool was dan sal ek miskien nou dink - wat gaan ons nou môre by Wiskunde doen of wat gaan ons nou weer by Natskei doen of by Rek, dis die drie vakke wat ek het, dit is die drie moeilikste vakke vir my, dis die vakke wat ek altyd probeer om my beste te doen om goed te doen en ja dis wat skool vir my lekker maak, die vakke nie net om elke dag my maats te sien nie en elke dag te lag nie, maar net om elke dag daardie vak te kry is lekker juffrou.	Inner-World Outer-World (school, curriculum) Inner-World (distinct characteristics) Outer-World	Support factors for academic success
5.	**Who and what support you in your learning process? Possible probes: factors intrinsic to the self, teachers, school, peers, parents, siblings, community resources.**		
Erika	Sê vir my ten opsigte van jou leerproses jy weet in die skool en die akadamie en so aan watter goeters help vir jou ondersteun jou in jou leerproses in jouself en dan in jou omgewing?		
Timothy	In my omgewing wat my leerproses ondersteun in die omgewing sal seker wees om die mense rondom my.		
Erika	Kan jy vir my sê wie hulle is?		
Timothy	Veral my ouers, vriende van my ondersteun my ook, hulle kan sien wanneer ek deur 'n moeilike tyd gaan of as 'n dag verbygaan waar ek met niemand praat nie as gevolg van een klein ding wat my omgekrap het en dan voel ek af maar ten spyte daarvan dan weet ek dat ek moet opstaan ek weet dat ek moet nog steeds aanbeweeg, ek weet nog steeds dat dit my gaan beïnvloed, maar dit gaan nie die toekoms vir my bepaal nie, dit gaan nie die persoon maak wat ek nie wil wees nie, as ek so dink aan die leerproses van myself nou, dan sou dit seker wees om te bid want ek bid elke dag as ek nou 'n lekker dag gehad het of	Outer-World (peers) Inner-World	

	'n swak dag gehad het, 'n dag waarin ek nie so goed voel nie of iets wat die dag vir my interessant gemaak het ek dan sou seker gaan bid net om vir my daardie motivering te gee net om weer goed te voel om myself of net om weer beter te doen in dit wat ek doen of partykeer gryp ek net 'n stukkie of lees ek sommer net, net om my gedagte af te neem van dit wat ek ondervind het.	Inner-World (spirituality)	Support factors for academic success
Erika	Sê vir my jou ouers hoe ondersteun hulle jou?	Outer-World (community)	
Timothy	Hulle sal vir my sê hoe ek 'n spesifieke ding doen veral as ek besluite moet neem soos bv. ek vat klasse by XXXXXX Hoërskool vir Wiskunde		
Erika	Ekstra klasse?		
Timothy	en dan vat ek ekstra klasse ook by XXXXX Kollege vir Wiskunde, Natskei en Engels.		
Erika	Sjoe!		
Timothy	Ek moet 'n besluit gemaak het tussen die twee want die tyd is nie lekker nie bv. hulle begin 9 uur tot 11 uur toe vir Wiskunde en hulle begin 8 uur af tot half 2 toe vir Wiskunde, Natskei en Engels. Elke vak is 'n uur lank, toe moet ek nou 'n besluit gemaak het, as ek XXXXXX toe gaan kan ek net vir Wiskunde bly want dan is die Wiskunde en Wiskunde periode al verby al en hulle ondersteun my so dat hulle help vir my met die besluite wat ek moet neem, hulle sal vir my raad gee en vir my sê wat die beste is om te doen en partykeer verskil ons van mekaar want dan weet ek moet ek nie miskien dit doen nie of moet ek nou my ma hulle glo en miskien hulle raad miskien volg of moet ek maar nou miskien my eie ding doen dan sal ek dit liewers maar alles los en kyk maar hoe gaan dit die volgende dag, maar hulle help vir my rerig veral met die skoolwerk, veral my pa want my pa het die vakke gehad wat ek nou het so ek kan baie by hom …	Inner-World Outer-World (parents) Inner-World Outer-World (role of the father)	
Erika	Wat doen jou pa?		
Timothy	My pa is 'n onderwyser		
Erika	O, hy is 'n onderwyser?		
Timothy	By my skool		

Erika	By jou skool?		
Timothy	Ja, my ma is ook 'n onderwyser by 'n laerskool so ek kan baie vir hulle vra, my ma gee maar nou graad 3 maar my pa gee graad 10 en graad 9 Geografie, maar ek het nou nie Geografie nie in daardie vak het ek nou Rekeningkunde, maar wat die ander vakke betref kan ek altyd na hulle toe gaan om vir my te gaan help en so.	Outer-World (relationship with and role of the parents)	Support factors for academic success
Erika	En sê vir my jou ondersteuning in die skool, die onderwysers, die klasopset hoe is dit vir jou?		
Timothy	Daar sal dae wees wat onderwysers sien dat ek nie oplet nie of dat iets met my gebeur het of dat ek iets ondervind het hulle sal vir my vra wat gebeur het of hoekom is ek so, hulle sal vir my, daar is een daardie onderwyser wat vir my Bio gee hy sal my uitjaag uit die klas uit dan sê hy ek moet my gesig gaan was en weer terug kom, so sal hy vir my sê, as ek nie reg is nie as ek nie hoe kan ek sê as ek nie oplet nie of as ek nou moeg is, want ek sit voor hom, hy kan sien wanneer ek nou slaap of oplet, hulle ondersteun my so dat ek beter voel die volgende dag.	Teachers (support) Teachers (support)	Provision within the inclusive education system
Erika	So dit klink vir my hulle het verwagtings van jou?	Outer-World (gifted peer support)	Support factors for academic success
Timothy	Ja ons is in 'n klas ons aldrie is in een klas waar baie van die onderwysers na ons opkyk hulle verwag baie van ons want ons is die top klas, ons is die klas wat Natskei het, die ander klasse het dieselfde vakke maar ons het spesifiek Natskei en omdat ons in daardie klas is, is daar baie mense wat baie dinge van ons verwag want dit is elke jaar die top klas, maar laasjaar was dit nou nie die geval nie, want die meeste kinders wat gedruip het, het uit daardie klas uitgekom, so dit is die gevaar wat vir ons kan inwag aan die einde van die jaar en omdat ons daardie vakke het dink ander klasse dat ons miskien verwaand is of omdat ons nou verskil teenoor hulle omdat hulle nou nie spesifiek daardie vak het nie en ons kry baie gevalle waar ander klasse met ons klas wil kom kompeteer, spesifieke kinders in ons klas wil	Teachers (attitudes and expectancies) Outer-World Teachers Inner-World	Provision within the inclusive education system

	slaan of mee baklei, so dit is 'n klas wat baie mense baie dinge van ons verwag, self die ouers weet waarmee het ons te doen waarmee het die kinders te doen in my klas, hulle ken die kinders in my klas, hulle verwag baie van ons en ons weet self wat van ons verwag word.	Peers	
			Unique support needs
		Peers (envy, rejection, bullying)	
		Teachers (expectation)/Outer-World	
Erika	En hoe laat dit jou voel?		
Timothy	Partykeer laat dit my nie so goed voel nie want dit is so baie druk	Family	
Erika	Is dit?	Teachers/Outer-World	
Timothy	Ja en die feit dat ons so baie is in 'n klas, in elke klas is daar omtrent 40 kinders en as ek vergelyk met my vriende wat op XXXXX is, wat op XXXXXXX is, hulle is omtrent 30 in 'n klas, so dit maak dit makliker vir die onderwyser en wat my versteurend maak is dat kinders wat Natskei en al agter hulle vriende wil gaan en dit is die geval in ons klas, daar is baie kinders wat nie in daardie klas hoort nie, daar is baie kinders wat daardie vak het net om dit het, nie omdat hulle weet waarna hulle wil gaan nie, maar net om dit te	Inner-World	
		School facilities (class sizes/composition)	
		Curriculum/School Facilities (Class Composition)	Provision within the inclusive education system
		Curriculum/School Facilities (Class Composition)	

APPENDIX J

A PORTION OF THE TRANSCRIPTION FROM THE FOCUS GROUP INTERVIEW – CODING: THEMES AND CATEGORIES

Focus Group Interview

Coding		Categories	Themes
4.	**How does the school support and contribute to your learning process?**		
Erika	Goed dan wil ek vir julle vra hoe ondersteun die skool jou in die feit dat jy 'n toppresteerder is of akademies goed vaar, hoe ervaar julle, hoe skuif die skool in om jou te help om nog jou beter self te wees? Verstaan julle? How does the school support and contribute to your learning process?		
Timothy	Vanselfsprekend ondersteun jou skool jou deur ekstra klasse te gee maar partykeer is dit ook nie, partykeer vind sommige kinders ook nie baat daarby nie, ander dink hulle het dit nie nodig nie, sommige dink dat hulle dit desperaat het hulle dit nodig, maar dis ook nie altyd die manier hoe skole of hoe my skool bv, vir my ondersteun nie, partykeer is dit is is dit hoe hulle jou ondersteun, jy kry die wat jou motiveer miskien soos die onderwysers, jou skoolmaats, jou klasmaats wat jou help alles soos in groepe leer of study en nog 'n dink is dat die manier hoe hulle vir jou ondersteun, partykeer ondersteun hulle vir jou maar dan voel jy ook nie asof hulle vir jou gehelp nie of partykeer het jy dit rerig nodig die ondersteuning van die skool maar dan bied hulle ook niks aan nie.	School facilities Teachers (availability) School facilities (lack support) Peer (support) Teachers (availability/support) School facilities (lack support) Teachers (availability/support) School facilities (support) Teacher (support)	Provision within the inclusive education system
Erika	Van julle wil iets by sê?		
Queen	Ons word baie weggestuur na universiteite toe en na plekke toe waar ons meer kan leer en so-aan. Ek dink hulle wil ons probeer motiveer en help om harder te werk om eendag daarby uit te kom en op die regte pad te bly en so. Dis hoe ek dink hulle ondersteun vir my.		

Natasha	Ek voel nie dat die skool vir my ondersteun nie, ek weet nie hoekom nie, maar ek voel ek net ek kry nie daardie nodige ondersteuning by hulle nie want dis net soos Queen gesê het dat hulle stuur ons weg na universiteite en so toe, maar dis nie omdat die skool dit wil hê nie is omdat ons genooi was daarnatoe. Die skool sal nie uit hulle eie uit die stap neem om miskien nou vir ons te motiveer of so nie. Jy kry net altyd, jy kry miskien jou pat op the back of so jy het goed gedoen, maar verder kry jy niks absoluut is net.	Teacher (support lacking) School facilities (lacking, not authentic/lacking to motivate) Teacher (support lacking/attitude)	Provision within the inclusive education system
5.	**What challenges do you experience at school that may affect your academic success negatively?**		
Erika	Ok dan wil ek die volgende: What challenges do you experience at school that may affect your academic success negatively? Wat by die skool sal jou negatief beïnvloed?		
Queen	Wangedrag en soos in ons sal in die klas sit dan kom daar kinders, ons skool is 'n baie raserige skool, kinders is sommer buite terwyl ons in die klas sit, dan weet ek nie hoekom nie soos die onderwyser is besig om iets belangriks vir jou te verduidelik dan kom iemand dan raas hulle hierbuite, hulle sing sommer op die stoepe en dit trek jou aandag af van die werk af en so of soms soos vir my is dit baie moeilik, want ek is op 'n Kleurlingskool en ek is 'n swart meisie somtyds laat dit my so sleg voel om my by die name te noem en slegte goed te sê vir my en so maak dit my hart, dan is ek nie meer lus vir leer nie in die klas nie en so.	School facilities Teacher (authority challenged) School facilities Inner-World (resilience) Peer (rejection, ridicule, bullying) Inner-World (experience) School facilities (class environment)	Support factors for academic success Unique support needs
Timothy	Ek dink dat in my opinie sal dit seker wees dissipline en respek, dit is seker wat die meeste kinders verloor het vir hulle onderwysers vir hulle klasmaats en seker vir hulle self ook wat ander beïnvloed soos ons wat wil presteer dan kry jy sommiges wat jou wil afdruk deur deur hoe kan sê grap te maak terwyl julle les kry of probeer die onderwysers swak maak vir hom in 'n swak lig sit deur grappe van hom te maak, dis ook seker die	School facilities (class composition) Peer (teacher disrespect) School facilities (class composition) Teacher (authority challenged) School facilities (class composition) Peer (teacher disrespect)	Unique support needs Support factors for academic success Support factors for academic success

	grootste deel wat nou vir my laat sleg voel.		Unique support needs
Natasha	Vir my is dit weer wanneer onderwysers ons klas sleg maak, ek het 'n bietjie van 'n temper so ek raak opstandig en wil dan glad nie werk nie en dan sit ek net dan is ek soort van op 'n strike en dan werk ek nie.	Teacher (derogatory remarks) Inner-World	Support factors for academic success
Jan	In die klasomgewing is daar baie keer soos tien persent van die klas miskien wat rerigwaar nie baie intelligent is nie, dan is hulle gereeld saam met die kinders wat bv. die werk verstaan in die klas en dan moet die kinders wat dit verstaan dit miskien vir die 2de keer hoor verduidelik, daar sit en wag vir die juffrou om 4 keer nog vir daardie selfde student wat 80 keer sy hande opsteek vir elke liewe ding sit en wag dat hy dit nou kan verstaan en dit irriteer my verskriklik.	School facilities (class composition) Curriculum (subject scope) Teacher (teaching style) School facilities (Class composition) Inner-World	Provision within the inclusive education system Unique support needs Provision within the inclusive education system Support factors for academic success

APPENDIX K

EXAMPLES OF THE COLLAGES OF PARTICIPANT A AND E

Example of the Collage of Participant A

Example of the Collage of Participant E

Example of the Collage of Participant E (continues)